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# ROYAL COMMISSION

ON

## COAL

UNCORRECTED TRANSCRIPT  
Royal Commission on Coal (1959)

### HEARINGS

HELD AT

### TORONTO

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ROYAL COMMISSION ON COAL

Proceedings of hearings  
held in the University  
Senate Chamber on the  
15th and 16th days of  
February, 1960.

HON. I. C. RAND, Q.C., Chairman

DR. A. E. CAMERON, Technical Advisor  
to the Commission

COMMISSION COUNSEL

Mr. W. D. D. Gunn, Q.C.

Mr. W. Keith Buck Secretary

Mr. J. J. Ellis Administrative Officer







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8	Economist	
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1 THE SECRETARY: Mr. Commissioner, I should  
2 like to introduce Mr. Clarkson, who will speak on  
3 behalf of the Provincial Government of Ontario and  
4 will read the first brief to you.

5 This brief will be recorded as Exhibit number 8.

6  
7 ---EXHIBIT "8": Brief of the Province of  
8 Ontario.

9  
10 SUBMISSION BY

11 THE PROVINCE OF ONTARIO

12 APPEARANCES:

13 Mr. Stuart W. Clarkson, Deputy Minister of  
14 the Department of  
15 Energy Resources,  
16 Province of Ontario;

17 Mr. Visser, Economist.

18 MR. CLARKSON: It has been fifteen years since  
19 the Coal Industry in Canada was last the subject of an  
20 exhaustive study. During these momentous years,  
21 the Canadian economy has expanded, developed and  
22 experienced a surge of growth unparalleled in recent  
23 times. The Canadian people, for their part, have  
24 made many changes in their way of life.

25 The most profound and most significant changes  
26 have been taking place in the field of energy  
27 production and energy consumption. It is timely  
28 and appropriate, therefore, that the Coal Industry  
29 be the subject of a further enquiry in this year  
30 1960. Of all Canadian commodities, few have been





1 subjected to such intense market competition over the  
2 past decade.

3 ~~These institutions, organizations and firms~~  
4 ~~which have an interest in the Ontario Coal Industry~~  
5 ~~will be making detailed representations to this~~  
6 ~~Commission. In view of this, it was felt that our~~  
7 ~~most useful contribution would be to provide the~~  
8 ~~general background in which the Industry operates.~~

9  
10 ONTARIO'S ENERGY SUPPLY

11  
12 ~~Historically, the Province of Ontario has~~  
13 ~~been an energy deficient area. There are no commercial~~  
14 ~~coal resources and local production of oil and natural~~  
15 ~~gas is small in comparison to the provincial energy~~  
16 ~~requirements. Only water power has been abundant as~~  
17 ~~an energy resource.~~

18 The first oil well in North America was  
19 located in Ontario just over one hundred years ago,  
20 and oil production in the province continues to this  
21 day. During 1959, just over one million barrels of  
22 oil were produced by Ontario wells. Our annual  
23 consumption, on the other hand, is ninety times that  
24 figure. Natural gas has been produced in this  
25 province since the last century. In 1959 our  
26 production of natural gas amounted to just under 17  
27 billion cubic feet; our consumption in 1959 was just  
28 under 90 billion cubic feet.

29 The only energy resource which we have had  
30







1 in abundance has been water power. Over the years,  
2 the demand for electricity has continued to grow at a  
3 high and steady rate. One after another, our potential  
4 water-power sites have been harnessed and Ontario has  
5 enjoyed cheaper electricity than almost any other part  
6 of the world with few exceptions. At last, however,  
7 we have reached the end of our resources and the  
8 future demand for electricity by our large and rapidly  
9 expanding population and industry must be met by the  
10 construction of thermal power stations burning coal,  
11 oil or gas.

12 At least with Ontario this development in  
13 the field of electric power is the most important  
14 single factor which will affect future demand for  
15 coal. The Hydro-Electric Power Commission of Ontario  
16 will provide details of this trend in their submission  
17 to this Commission.

18 Historically, coal has been the major fuel  
19 source in Ontario. The coal mines in Pennsylvania,  
20 Kentucky and Virginia, because of their proximity  
21 and their access to cheap lake transport, have had  
22 a distinct market advantage. Post-war productivity  
23 gains have enabled the American mines to hold costs  
24 down and thereby to retain their competitive position.  
25 It has been forecast by United States fuel experts  
26 that the price of United States coal will remain  
27 reasonably steady in the years ahead.

28 The post-war figures of coal consumption in  
29 Ontario have exhibited very little trend; declining  
30







1 consumption in one sector has been offset by increas-  
2 ing demand in another. In 1945, approximately 18½  
3 million tons of coal were available for consumption,  
4 and in 1957 the comparable figure was just over  
5 17 million tons. There are indications, however,  
6 that a more than usual decline has occurred during  
7 the past two years. It is clear, of course, that  
8 coal has not captured its share of the growing  
9 Ontario energy market, and that it has been declining  
10 in relative importance as a fuel source.

#### 11 12 THE CARROLL COMMISSION

13  
14 It is convenient to look back to the Report  
15 of the last Royal Commission on Coal (The Carroll  
16 Commission) in 1946. This excellent document has  
17 retained its usefulness and much of it will need  
18 little revision despite the passage of time. However,  
19 even while the Report was being prepared, the oil  
20 industry was on the verge of the great Leduc discovery  
21 in Alberta which has forever changed the balance of  
22 energy sources in Canada.

23 The changes which have taken place in the  
24 use of energy in Ontario can be highlighted by refer-  
25 ence to the forecast on page 579 of the 1946 Report:

26  
27 "Despite the importance of alternative sources  
28 of energy, coal is, and will probably continue  
29 to be, the most important source of energy for  
30 railway locomotives and industrial and domestic  
heating."





Looking back, we see that in the fifteen years which have passed since the writing of these words, coal has almost completely disappeared from the railways, and has declined as a household fuel in Ontario from 70% of the total market to about 20% at the present time. Only in the industrial market has coal maintained its leading position as a fuel.

#### POST-WAR ENERGY CONSUMPTION

As we have indicated, Ontario is a major consumer of the four main sources of energy: coal, oil, natural gas and water-power. Oil, and more recently, natural gas have been rapidly increasing their share of the fuel market while the relative position of coal in the total energy supply has been declining steadily.

Over the past fifteen years the greatest increase in the use of oil and natural gas has been in the residential and transportation sectors of the economy. Coal has been almost completely replaced by diesel oil on the railroads, and coal consumption in the residential market has been slowly declining for many years now. Retail coal sales have dropped from approximately 6½ million tons after the War to approximately 2½ million tons today. With the arrival of natural gas from Western Canada, manufactured gas is fast disappearing as communities convert their distribution systems. This has meant a further drop in







1 coal consumption.

2 ~~However, the basic pattern of the Coal~~  
3 ~~Industry in Ontario has not been greatly altered over~~  
4 ~~the past fifteen years. Ontario continues to consume~~  
5 ~~more coal than the rest of Canada, and our consumption~~  
6 ~~is greater than the total Canadian production.~~

7 United States coal remains the cheapest  
8 fuel available in much of Ontario, and the industrial  
9 sectors of the economy have not in the past shown the  
10 same tendency to turn to oil. In the industrial  
11 market for bulk fuel, costs are important and industry  
12 has steadily continued to rely on coal because of the  
13 favourable price differential.

14 ~~Two recent developments are expected to~~  
15 ~~have a major impact on the Coal Industry although it~~  
16 ~~is still too early to evaluate their full effects.~~  
17 ~~First is the availability in quantity of natural gas~~  
18 ~~from Western Canada, and the second major development~~  
19 ~~is the St. Lawrence Seaway.~~

20 ~~1959 was the first full year in which we~~  
21 ~~have had large quantities of natural gas available.~~  
22 ~~It has shown itself to be a particularly effective~~  
23 ~~competitor in Northern Ontario where it can be supplied~~  
24 ~~to industrial customers at a lower cost per million~~  
25 ~~Btu's than either coal or oil. While it is still too~~  
26 ~~early to evaluate the full effects of natural gas~~  
27 ~~competition on the demand for coal, there are indic-~~  
28 ~~ations that it will have a wide industrial application~~  
29 ~~and therefore that it may replace substantial quantities~~  
30







1 of coal. If so, natural gas will have succeeded in a  
2 market where oil has not been so successful.

3 Similarly, it is still too early to evaluate  
4 the full effects of the St. Lawrence Seaway on the  
5 movement of coal. The subject of shipping space and  
6 coal transportation is a complex one. It is evident,  
7 however, that it should now be easier and cheaper for  
8 coal from Eastern Canada to move into Ontario, but at  
9 the same time it should also be easier and cheaper  
10 for American coal to move eastward into Quebec.

#### 12 FUTURE ENERGY TRENDS IN ONTARIO

14 Our object in assessing the future trends  
15 in energy consumption in Ontario is to obtain the  
16 answers to two questions: first, will coal consumption  
17 increase or decrease in the coming years, and second,  
18 given the demand for coal, how can it be provided at  
19 the lowest possible cost to industry and other  
20 customers? Remembering the predictions of the Carroll  
21 Commission, we hasten to point out that neither of  
22 these questions can be answered with much assurance.  
23 Our answers will be right or wrong depending on the  
24 accuracy with which we predict future trends in  
25 population, industry, energy consumption, and many  
26 other factors less amenable to prediction. Not the  
27 least of these is a forecast of the future use of  
28 atomic energy.

29 While the oil industry has stabilized its  
30





1 market in Ontario, natural gas is in the midst of  
2 establishing itself at a new and much higher level of  
3 availability than in former years. There seems little  
4 possibility that coal will recapture the markets which  
5 it has lost during the past decade or so. However,  
6 despite the increasing competition from other energy  
7 forms, particularly natural gas, we predict that coal  
8 will continue to be the major industrial fuel in  
9 Ontario.

10 ~~Further declines in coal consumption can~~  
11 be expected for the next two or three years, mainly  
12 as a result of losses to natural gas. By that time,  
13 however, any trend from coal to other fuels, par-  
14 ticularly by industry, will have worked itself out.  
15 Because fuel costs are important to industry, it  
16 is likely that low cost American coal will continue  
17 to be a major industrial fuel. Early in the 1960's  
18 therefore, the rapidly increasing quantities of coal  
19 needed for power generation added to the steady growth  
20 in requirements for the steel industry will halt the  
21 overall decline in ~~coal~~ consumption in this province.

22 ~~The situation a decade from now will~~  
23 depend to a large extent on whether atomic power has  
24 been successfully developed to the point where it can  
25 produce electricity as cheaply as coal. If atomic  
26 power is competitive, than our local supplies of  
27 uranium will replace what would otherwise be a demand  
28 for imported coal.  
29  
30







1       We have noted that historically the province  
2 has drawn around 98% of its coal requirements from  
3 the United States. We have also noted that United  
4 States coal has enjoyed a cost advantage in the Ontario  
5 fuel market and that this has been a major factor  
6 enabling coal to maintain its position as the major  
7 industrial fuel. We foresee no important developments  
8 which are likely to change this situation, and  
9 therefore we anticipate that the supply routes and  
10 sources will continue to be much the same as they have  
11 in the past.

#### 12                               SOME GENERAL CONSIDERATIONS

13  
14  
15       Since Ontario does not produce coal but is  
16 an important coal consumer, it is natural that our  
17 primary concern is directed toward ensuring, first,  
18 an adequate supply of energy for our people and our  
19 industries and, second, that energy is available at  
20 the lowest possible price.

21       We do not feel capable of making other than  
22 general comments on the subject of subventions, tariffs  
23 or other forms of assistance to the important coal  
24 producing sector of our Canadian economy. In recent  
25 years our consumption of Canadian produced coal has  
26 been a very small percentage of our total coal  
27 consumption. However the significance of these  
28 tonnages of Canadian coal must be considered in  
29 relation to their importance to the Canadian producers,  
30







1 and the whole subject of subventions will be one of  
2 the matters which this Commission will wish to study.

3 The Carroll Commission noted that "the  
4 history of Canadian coal tariffs has been closely  
5 associated with the Nova Scotia coal industry. The  
6 major changes in the tariffs on bituminous coal were  
7 primarily made to assist the marketing of Nova Scotia  
8 coal". It is doubtful, however, whether the tariff  
9 has, in fact, been an effective method of encouraging  
10 the consumption of Canadian produced coal in this  
11 province.

#### 12 CONCLUSION

13  
14  
15 The result of our enquiry is that the  
16 market for coal in Ontario may show some further  
17 decline for the next two or three years -- a period  
18 when natural gas will be increasing its share of the  
19 fuel market. This may be followed by a few years of  
20 stability as the increasing coal requirements of the  
21 electric power industry and the steel industry offset  
22 declines in other sectors. Finally, there is the  
23 possibility of a rapid increase in annual requirements  
24 in the late 1960's as the demand for electricity  
25 continues to grow. During the 1970's the decisive  
26 factor in the demand for coal will be the competitive  
27 position of atomic energy. Assuming, however, that  
28 conditions remain much as they have been in recent  
29 years, nearly all of the required supply will continue  
30





1 to come from the United States.

2  
3 ~~That is the end of our submission, Mr.~~  
4 Commissioner.

5 THE COMMISSIONER: Mr. Gunn?

6 MR. GUNN: Mr. Chairman, I think the province  
7 has, by virtue of this exhibit, rendered statements  
8 and submissions to the Commission, therefore I don't  
9 wish to ask any questions on the exhibit.

10 THE COMMISSIONER: Just two or three questions  
11 I would like to ask, Mr. Clarkson.

12 ~~What basis have you for any view as to the~~  
13 ~~probable position of atomic energy within the next~~  
14 ~~ten or fifteen years? Is there anything of late~~  
15 ~~discovery that gives support to judgment of that~~  
16 ~~sort at all?~~

17 MR. CLARKSON: As you know, sir, I was connected  
18 with the Atomic Energy of Canada for some years --

19 THE COMMISSIONER: You stated it more as a  
20 possibility.

21 MR. CLARKSON: Yes; and we have in Canada  
22 tenders out now for a very large station which will  
23 be built at Douglas Point, Ontario; I believe  
24 Ontario Hydro will give you more details on that.  
25 It is to be two hundred thousand kilowatts, a very  
26 large station, and it is scheduled for completion  
27 in 1965. Now, depending on the success of the  
28 operation of this station, it could be that there  
29 would be further atomic energy stations rather than  
30







1 thermal power stations.

2 THE COMMISSIONER: Where is this plant?

3 MR. CLARKSON: The location?

4 THE COMMISSIONER: Yes.

5 MR. CLARKSON: At Douglas Point.

6 THE COMMISSIONER: Where is that?

7 MR. CLARKSON: Near Kincardine, Port Elgin  
8 area.

9 THE COMMISSIONER: You contemplate the sale  
10 of power for ordinary purposes?

11 MR. CLARKSON: Yes. If this plant operates  
12 successfully, I understand it is to be purchased  
13 outright by Ontario Hydro for incorporation into their  
14 system.

15 THE COMMISSIONER: And it is expected to be  
16 competitive with other fuels?

17 MR. CLARKSON: Not the first plant; it is a  
18 development plant. But if it operates successfully.

19 THE COMMISSIONER: What do you mean by  
20 "successfully"?

21 MR. CLARKSON: I think one of the basic  
22 considerations in supplying electricity is that it be  
23 available, say, 80% or 90% of the time.

24 THE COMMISSIONER: Do you take into account  
25 the economics of it when you say successfully?

26 MR. CLARKSON: Not in the first station. I  
27 think first they want to prove that these stations  
28 will operate and operate continuously so that they  
29 can depend on them, and then from the operation of the  
30







1 first station our atomic energy people will have some  
2 basis for estimating what the second or the third  
3 station could produce power at.

4 THE COMMISSIONER: I suppose there is no  
5 obligation on the Hydro to take it over.

6 MR. CLARKSON: No.

7 THE COMMISSIONER: It remains a Dominion work  
8 up to that point?

9 MR. CLARKSON: Yes. I believe the agreement  
10 states that if it does fulfill certain conditions  
11 then it will be operated. There is an agreement for  
12 the first station.

13 We held the first Canadian conference on  
14 uranium and atomic energy in Toronto in mid-January,  
15 and it was sponsored by my Department, the Department  
16 of Energy Resources for the Province of Ontario, and  
17 the conclusions that we felt came out of that  
18 conference, which was attended by experts from  
19 Canada and the United States and Europe, were that  
20 it is still too early to completely evaluate the  
21 future of atomic energy or when it will become  
22 competitive.

23 THE COMMISSIONER: Has there been any progress  
24 in bringing it to more effective production?

25 MR. CLARKSON: Oh, yes. There are stations in  
26 operation in the United States and in the United  
27 Kingdom, and there are several under construction.  
28 A great deal of effort has been devoted to this subject.

29 THE COMMISSIONER: I was just wondering about  
30





1 the improving and refining the economy of production.

2 MR. CLARKSON: The industry itself has no doubt  
3 that it can produce electricity and do it well, but  
4 the point is whether it can be done economically.

5 THE COMMISSIONER: That hasn't been decided yet.

6 MR. CLARKSON: No.

7 THE COMMISSIONER: You speak of gas and you  
8 speak of forever, and I was wondering if you were  
9 in danger of following the Carroll Commission. What  
10 life do you base that on, the life of gas supply in  
11 large quantities?

12 MR. CLARKSON: Some time ago, not too long ago,  
13 we appeared before the National Energy Board to state  
14 our position, and, of course, we in Ontario are quite  
15 dependant upon gas from Western Canada. We had to  
16 decide whether we favoured the exportation of natural  
17 gas at this time, and it was our decision that by  
18 encouraging the industry at this time that was the  
19 most effective way of getting the industry to go out  
20 and get more gas which would look after our future  
21 requirements. Underlying we have a belief that the  
22 gas is there in Western Canada in quantity.

23 THE COMMISSIONER: What period of time does  
24 your judgment consider that it will be available in  
25 the quantities you have mentioned?

26 MR. CLARKSON: Well into the indefinite future.

27 THE COMMISSIONER: Indefinite?

28 MR. CLARKSON: Yes.

29 THE COMMISSIONER: Anywhere from 30 to 50 years.  
30







1 MR. CLARKSON: Beyond that.

2 THE COMMISSIONER: Beyond that?

3 MR. CLARKSON: Yes.

4 THE COMMISSIONER: And in quantity that will go  
5 far to satisfy the present demands in their normal  
6 expansion.

7 MR. CLARKSON: Including normal expansion, yes.

8 THE COMMISSIONER: And yet you say there will  
9 always be a demand for coal in this province.

10 MR. CLARKSON: We feel that, sir.

11 THE COMMISSIONER: And that coal is basic.

12 MR. CLARKSON: Yes.

13 THE COMMISSIONER: What is the reasoning that  
14 leads you to that if this gas is in such quantity?

15 MR. CLARKSON: It is a matter, to my mind,  
16 sir, of price. Industry is more conscious of costs  
17 than is a householder, for example, who puts a premium  
18 on convenience and other considerations. The fact  
19 that our natural gas is two thousand miles away -  
20 it is one of our competitors - does much to favour  
21 coal in this province.

22 THE COMMISSIONER: In your opinion, then, cheap  
23 coal is quite competitive with gas when you now get  
24 it from the west.

25 MR. CLARKSON: Yes.

26 THE COMMISSIONER: And I suppose I may draw  
27 the inference that cheap coal must come from the  
28 United States.

29 MR. CLARKSON: Based on the past, yes.  
30





1 THE COMMISSIONER: Have you any idea of the  
2 volume in exports, manufactured goods, produced in  
3 Ontario?

4 MR. CLARKSON: I am sorry, I don't have the  
5 information with me.

6 THE COMMISSIONER: I was just wondering how any  
7 increase, say, in the cost of coal or gas would  
8 affect your export position. But you are not in a  
9 position to state.

10 MR. CLARKSON: I am not in a position to  
11 state. I have made studies in the past, and in  
12 some industries energy is not a major cost component,  
13 but, of course, in other industries it is.

14 THE COMMISSIONER: I didn't ask whether any  
15 member of the audience would care to put questions to  
16 Mr. Clarkson. If you do at any time, it is quite in  
17 order for you to do so. This is just a general  
18 discussion; there are no formalities, other than  
19 getting at the facts.

20 THE SECRETARY: Mr. Commissioner, may I  
21 introduce Mr. D.B.Scully, President of the Steel  
22 Company of Canada, who wishes to address you prior  
23 to the submission of his brief.

24 MR. SCULLY: Mr. Commissioner, our submission  
25 was prepared under the direction of Doctor Petrie,  
26 and I am going to ask him to present it to you.  
27 I have with me also a technical expert from our  
28 works in Hamilton, and also our economic advisor,  
29  
30







1 so we have come equipped to help you if we can.

2 I should also like to extend to you an invitation  
3 to see our operations if, at some time during your  
4 deliberations, you feel that may be of help.

5 THE SECRETARY: Mr. Commissioner, this brief  
6 will be recorded as Exhibit number 9.

7  
8 ---EXHIBIT No. 9: Brief of The Steel Company  
9 of Canada, Limited.

10  
11 SUBMISSION OF  
12 THE STEEL COMPANY OF CANADA, LIMITED

13  
14 APPEARANCES:

15 Mr. D.B.Scully,

16 Dr. J.R.Petrie,

17 Mr. Stuart Armant

18 Mr. Alec. D. Fisher

19 Mr. Farrell.

20  
21  
22  
23 DOCTOR PETRIE: We thank you, Mr. Commissioner,  
24 for this opportunity to present to you some facts  
25 connected with the use of metallurgical quality coking  
26 coal by the Steel Company of Canada, Limited. Stelco  
27 is only a minor consumer of steam coal, and therefore  
28 this submission will deal only with metallurgical  
29 coal.  
30





I INTRODUCTION

Steel is one of Canada's largest and most important industries. The Steel Company of Canada is the largest producer in the industry. The Steel Company's operations are national in scope, not only in product distribution but in widespread development of its own mining and secondary manufacturing operations from Newfoundland to Alberta. The Company is one of the largest consumers of coal in Canada.

Approximately 1.6 million tons are required each year at Hamilton to supply metallurgical coke to the blast furnaces. It might appear that the steel industry in Hamilton is potentially a market of major importance for Canadian coal. This in fact is not the case for the following reasons: -

1. There has been an increasing emphasis throughout the world on the production of steel products to close and more rigid specifications. It is imperative, therefore, that Stelco use high quality metallurgical coal if its steel is to remain competitive with domestic and foreign steels in the Canadian market.
2. Stelco has consistently followed a longstanding policy of supplying high quality steel at competitive prices throughout the entire Canadian economy. Unless the Company continues its practice of utilizing the low cost and high







quality raw materials essential to the economical production of steel to meet existing consumer specifications, it will be unable to maintain this policy.

3. Adequate supplies of Canadian coal with the requisite qualities for metallurgical coke have never been within economic reach of the Hamilton area. The Steel Company and other Ontario steel makers have been compelled, therefore, to use coal imported from the United States

## II THE STEELMAKING PROCESS

## A. RAW MATERIALS

The basic raw materials entering the production of primary steel are: - (1) iron ore; (2) metallurgical quality coaking coal; (3) limestone; (4) scrap steel; and (5) fuels such as oil and gas.

## B. THE COKE OVEN

Under existing techniques in the production of steel, metallurgical coal is a basic raw material. As a preliminary step in the production process this coal is converted into metallurgical coke in coke ovens. This process also produces coke oven gas which is burned in various heating and heat treatment furnaces throughout the steel plant, as well as various coal chemicals.





1 C. THE BLAST FURNACE

2 The first stage in the actual production of steel is  
3 the manufacture of pig iron in the blast furnace.  
4 This furnace is fed with metallurgical coke, iron  
5 ore (or an agglomerated product of iron ore), and  
6 limestone. The quality of the pig iron and its  
7 production cost are governed directly, of course, by  
8 the quality and cost of the three basic raw materials.  
9 The presence or absence of undesirable elements  
10 in the raw materials has very important significance  
11 for the quality of the iron, which in turn directly  
12 influences the quality of the steel.

13 It is unlikely that the blast furnace will be  
14 replaced to any major extent for many years to come  
15 and therefore we believe that this market for coal  
16 will continue.

17 D. THE OPEN HEARTH FURNACE

18 Steel is made exclusively in open hearth furnaces  
19 at Stelco, although other types of steelmaking furnaces  
20 are used at other Canadian plants. The open hearth  
21 furnace is charged with a mixture of molten pig iron,  
22 scrap and limestone. The necessary heat is provided  
23 by the combustion of coke oven gas or fuel oil.  
24 The end result of the open hearth furnace operation  
25 is the steel ingot. The ingot in turn is the source  
26 of the full range of steel products which are  
27 associated so intimately with the day to day life of  
28 every Canadian man, woman, and child.  
29  
30







### III COAL

#### A. QUALITIES REQUIRED FOR METALLURGICAL PURPOSES

Since the latter part of the nineteenth century coal has been an inseparable and irreplaceable component in the production of steel. However, not all coal makes coke of the high quality needed in steelmaking.

Indeed, only certain bituminous coals in Canada and elsewhere have coking characteristics, and many of these do not provide metallurgical coke of sufficiently high quality for blast furnace use. Good metallurgical coke must have at least two basic characteristics:--

(1) It must possess the strength necessary to maintain its structure when mixed with ore and limestone in the blast furnace under conditions of great heat and stress; (2) It must possess sulphur and ash content sufficiently low that excessive amounts of flux are not required to carry off these impurities in the slag.

The removal of ash and sulphur can only be accomplished by increased consumption of fluxes and fuels and this adversely affects operating rates and costs of blast and open hearth furnaces.

#### B. TECHNOLOGICAL CHANGES IN BLAST FURNACE OPERATIONS

##### AND COAL REQUIREMENTS

The steel industry is constantly striving to effect savings in production costs. Important technological changes in the operation of blast furnaces have resulted in improved efficiencies and greater output.

Among the more recent innovations are: - (1) The use of iron ore pellets and other high grade ores that





1 contain less and less slag making ingredients. As  
2 slag is the only practical means of carrying off  
3 sulphur, and as blast furnace slag can carry off only  
4 limited amounts of sulphur, it has become more important  
5 than ever to keep sulphur levels low in blast furnace  
6 coke.

7 (2) The use of self-fluxing sinter. Self-fluxing  
8 sinter is produced by mixing limestone, dolomite, iron  
9 ore and coke breeze, with subsequent fusion of the  
10 particles at a high temperature on a sinter strand.  
11 Sinter and coke are then charged to the blast furnace  
12 with or without other iron bearing materials. To  
13 derive the fullest advantages of this process of  
14 increasing blast furnace output, the metallurgical  
15 coke must not, because of a high sulphur content,  
16 require further flux which would mean a reduction  
17 in the amount of iron in the charge. The whole field  
18 of technological improvement in pig iron and  
19 steelmaking turns vitally on the employment of coal  
20 and coke, low in sulphur and ash content.

21  
22 IV THE STEEL COMPANY OF CANADA,  
23 AND COAL  
24

25 The Steel Company and its predecessor company  
26 has been making steel for 60 years. Although the  
27 Company manufactures a wide range of steel products,  
28 the core of its business to-day is the manufacture  
29 and sale of sheet and sheet products. This emphasis  
30







on sheet steel is a general trend throughout the steel industry and is accompanied by more demanding specifications made on the industry by its customers.

An indication of the Company's products follows:

A. PRODUCTS

1. Sheet Steel

The Company's chief manufacturing operation is the production of sheets in the following forms: -

(a) Hot rolled, for railway freight cars, barrels, tanks and similar uses.

(b) Cold rolled, for automobile bodies, household appliances, etc.

(c) Galvanized, for such end products as culverts, roofing, siding and duct work.

(d) Tin plate, used principally in the form of cans by the food and beverage industry.

2. Plate

The Company rolls plate for construction of bridges, pipe lines, large storage tanks, ships' hulls, locomotives, etc.

3. Bars and Rods

The Company rolls bars which are used in automobiles, railway cars, agricultural machinery, general construction, and many other areas. Rods are drawn into wire for manufactured wire products for a host of markets, such as nails, fence, bolts, wire mesh, wire rope and springs.





1 The search for high quality materials for the industry  
2 is continuous. These include metallurgical coal, iron  
3 ore, fluxes, fuels, and the many other materials  
4 required in the making of steel.

5 As steel plants are very expensive and long lived,  
6 and as present day markets require steels produced  
7 to close analysis, the Steel Company of Canada has  
8 purchased suitable raw materials properties to  
9 provide it with assured supplies and known qualities  
10 of metallurgical coal, iron ore, and limestone.

11 It is highly important that the raw materials be of  
12 consistent quality, with objectionable components  
13 held to a minimum. Stelco feels that it must use the  
14 best possible raw materials to produce the high quality  
15 steels that will meet the complete specifications  
16 of the domestic industry. The Canadian steel industry,  
17 while efficient, must meet the second highest wage  
18 rates in the world, and Stelco is striving to produce  
19 good steels that its Canadian customers will prefer  
20 to foreign steels. The public is not compelled to  
21 buy our products. Therefore we must make steels that  
22 they will choose to buy. We feel that good metallurgical  
23 quality coking coal is an essential element in our  
24 manufacture of high quality steel.

25 VI THE COMPANY HAS BEEN FACED WITH AN  
26 HISTORIC AND CONTINUING LACK OF  
27 SUITABLE CANADIAN COAL ACCESSIBLE  
28 TO HAMILTON. IT HAS BEEN NECESSARY  
TO IMPORT COAL FROM THE UNITED  
STATES.

29 The steel Company is a Canadian company. It employs  
30







1 about 16,000 Canadians and over 90 per cent of its  
2 outstanding shares are held in Canada. The Company  
3 would prefer to use Canadian coal. Unfortunately the  
4 Company has never been able to find a source of coal  
5 in this country that would meet minimum specifications  
6 and which could be laid down economically in Hamilton,  
7 on a continuing basis.

8 The lack of suitable Canadian coal available to  
9 Hamilton long ago compelled the Company to invest in  
10 and develop extensive coal properties in Pennsylvania  
11 and West Virginia in order to assure a continuing  
12 supply of high quality metallurgical coal. High  
13 volatile coals from Pennsylvania, and low volatile  
14 coals from West Virginia are crushed and blended  
15 before charging to the coke ovens. The mixture and  
16 blend are so regulated as to obtain optimum coke oven  
17 operation and at the same time produce the highest  
18 quality blast furnace coke. The coals produced from  
19 Stelco's U.S. properties are suited to the Company's  
20 requirements. They are moderately low in sulphur  
21 content and have the requisite physical properties.  
22 As low cost coals they are an important factor in  
23 the Company's policy of supplying Canada with steel  
24 at lowest possible prices. The coal properties in  
25 which the company has invested \$9 millions are  
26 completely mechanized in underground operations and have  
27 the most modern cleaning and washing facilities. These  
28 Company mines are basic to the overall production  
29 programme and supply virtually all of the Company's  
30





1 coal requirements. Output per man per shift has  
2 increased to the level of 8 to 14 tons.

3  
4 VII STEEL IN THE CANADIAN ECONOMY

5  
6 A. STEEL IS THE MAINSPRING OF INDUSTRIAL DEVELOPMENT

7 The role of steel in an industrialized country need  
8 not be laboured. It is perhaps sufficient to indicate  
9 the substantial increase in the use of steel in  
10 Canada during the major expansion of the national  
11 economy. The trend is shown in the following  
12 tabulation, which indicates

13 Apparent Per Capita Production  
14 of Crude Steel

15 (Pounds)

16 Source: United Nations Statistical  
17 Yearbook;  
18 Steel Magazine, January 4, 1960.

	<u>Average</u> <u>1936-38</u>	<u>1958</u>	<u>%Increase,</u> <u>from 1936-38</u>
19 United States	701	977	39%
20 Canada	333	681	105%
21 United Kingdom	500	851	70%

22  
23  
24 The Steel Company has kept pace with the nation's  
25 increasing steel requirements. Over the last 50 years  
26 the Company's production has risen from 93,000 tons  
27 of steel to over 2,400,000 tons per year and capacity  
28 is now being increased to 3,000,000 tons a year.







1 B. THE INDUSTRY REQUIRES VAST CAPITAL INVESTMENT AND  
2 IS HIGHLY COMPETITIVE

3 Obviously the price of steel has important bearing on  
4 national economic development and the welfare of every  
5 citizen. The highly competitive nature of the  
6 industry necessitates the maintenance of the lowest  
7 possible cost structure. This situation has compelled  
8 the Company to conduct fully integrated operations.  
9 Accordingly, the Company has invested substantially in  
10 coal mines, iron mines, and limestone quarries, as was  
11 noted in an earlier paragraph. This policy has assured  
12 adequate supplies of the most suitable raw materials  
13 at the lowest possible cost. The Company's programme  
14 of expanding and modernizing its capacity for manufactur-  
15 ing primary steel, semi-finished and finished products  
16 has involved an expenditure of \$250 million over the  
17 past 10 years. To-day the Company's original investment  
18 of \$22 million has been increased to some \$350 million  
19 and working capital has increased from about \$4 million  
20 to well over \$100 million.

22 C. THE STEEL COMPANY'S PRODUCTION COSTS ARE REFLECTED  
23 IN COMPETITIVE AND FAVOURABLE STEEL PRICES FOR  
24 CANADIAN CONSUMERS

25 It is commonly accepted in Canada as a generality that  
26 Canadian manufacturers cannot compete on price  
27 with U.S. producers because of the much longer and  
28 larger production runs typical of U.S. manufacturing.  
29 The enormous domestic market for U.S. manufacturers  
30 in relation to the domestic market for their Canadian





1 counterparts is the basic factor in the typical  
2 disparity in production costs as between the two  
3 countries. The Steel Company of Canada, however,  
4 has overcome this problem effectively by its  
5 successful operations, costwise, as an integrated  
6 company. Until recent years mill prices of practically  
7 all steel products in Pittsburgh were considerably  
8 lower than the Steel Company's Hamilton prices.  
9 Stelco base prices in Hamilton are lower than  
10 Pittsburgh prices today for many types of steel. This  
11 favourable position would not have been possible  
12 had the Company failed to avail itself of the highest  
13 quality raw materials, including metallurgical coal.  
14 The consumers of Canadian steel, in manufacturing,  
15 construction, transport and agriculture, benefit  
16 from these fully competitive prices. While the  
17 Company is interested in the development of markets  
18 for Canadian coal, we feel that the growing markets  
19 for high quality steels require metallurgical coals  
20 that have not been available competitively at  
21 Hamilton from Canadian sources.

22 MR. GUNN: On page one of your brief, which is  
23 Exhibit 9, near the bottom:

24 "It is imperative, therefore, that Stelco use  
25 high quality metallurgical coal if its steel  
26 is to remain competitive with domestic  
27 and foreign steels in the Canadian market."

28 Is there any possibility at all of Canadian Coals  
29 attaining the standard that you require in the  
30







1 manufacture of steel, either Eastern or Western?

2 MR. FISHER: There is some question as to  
3 whether the Eastern coals are available in sufficient  
4 quantities with the necessary physical and chemical  
5 characteristics that are necessary for good coking  
6 and metallurgical operations.

7 The Eastern coals are characteristically high  
8 in sulphur. They are also quite high volatile coals  
9 which are not too satisfactory from a physical  
10 standpoint because of the high volatile characteristics  
11 of the coal and petrographic constituents. There is  
12 a substantial amount of fissuring in the coke that is  
13 produced, or breaking up of the coal, also of the coke,  
14 and the result is it doesn't make a satisfactory  
15 blast furnace fuel that is desirable in order to  
16 support conditions within a blast furnace.

17 MR. GUNN: And does that apply to Western  
18 coals as well?

19 MR. FISHER: The Western coals are probably  
20 better from the standpoint of the type of coke that  
21 they produce except that they have a high swelling  
22 index which creates a pressure within the coke oven  
23 itself and creates difficulty in connection with the  
24 maintenance of the physical condition of the oven  
25 structure.

26 In other words, pressure upon the oven wall  
27 during the carbonization period creates stresses which  
28 damage the oven wall.

29 Now the Western coals are characteristically  
30





1 somewhat lower in volatile matter and would probably  
2 have to be blended with other coals in order to make  
3 them entirely satisfactory. Economically they are  
4 better than the Eastern coals; lower in ash and  
5 sulphur.

6 MR. GUNN. I suppose that it boils down to  
7 this: That there is no possibility of either Eastern  
8 or Western coals being used by your company, is that  
9 correct?

10 MR. FISHER: I would doubt that Eastern coals  
11 are available in sufficient quantity, with sufficiently  
12 low sulphur content to be satisfactory to our  
13 operation.

14 The sulphur contained in the coking coals  
15 that are produced and used from the east are about  
16 2.3% sulphur which is too high for our operation  
17 creating an uneconomical blast furnace operation to  
18 try and use coals with that high sulphur content.

19 MR. GUNN: It boils down to the fact then  
20 that coal from the east will not be used by your  
21 company?

22 MR. FISHER: That is right.

23 MR. GUNN: Does the same apply to Western  
24 coals as well?

25 MR. FISHER: Not to the same extent, but  
26 they are certainly not economically desirable because  
27 of the long distance, the long haul.

28 MR. GUNN: Then I imagine the Western coals  
29 will also not be used by your company in the  
30







1 manufacture of steel?

2 MR. FISHER: That is right sir.

3 THE CHAIRMAN: May I ask a few questions on  
4 that line? Your company has been in existence about  
5 60 years?

6 MR. FISHER: Yes sir.

7 THE CHAIRMAN: And of course 60 years ago I  
8 suppose there was no Canadian coal brought into this  
9 Province was there?

10 MR. FISHER: There was no Canadian coal of  
11 coking quality brought into this Province.

12 THE CHAIRMAN: Has that coal been tried in  
13 your plant at all?

14 MR. FISHER: We have not tried either the  
15 Western or the Eastern coal but a subsidiary of ours  
16 tested the use of both types of coal, both from  
17 Western Canada and also from Cape Breton.

18 THE CHAIRMAN: When was that?

19 MR. FISHER: The Cape Breton coals were used  
20 on a test basis in 1937 at the Hamilton By-Product  
21 Company and due to high sulphur content of the coal  
22 considerable use of other coals in order to dilute  
23 the effect of the sulphur was necessary, and it was  
24 found economically unsatisfactory to use the coal.

25 Also the physical constituents of the coal  
26 even on a small percent of the Cape Breton coal  
27 was not nearly as satisfactory as the normal coke  
28 produced from American coals. In other words, the  
29 coal did not have the necessary strength or ability  
30





1 to avoid shattering, or break down of the coke.

2 THE CHAIRMAN: And the maintenance of the  
3 structure in the coke?

4 MR. FISHER: That is right.

5 THE CHAIRMAN: When did you acquire your  
6 coal in the United States? Approximately?

7 MR. SCULLY: They have been purchased over  
8 quite a number of years.

9 THE CHAIRMAN: Yes, I assume that but I was  
10 wondering if you could tell me.

11 MR. SCULLY: It goes back into the 30's I believe  
12 when the first coal properties were purchased.

13 THE CHAIRMAN: As late as the 30's?

14 MR. SCULLY: I would think about thirty years  
15 ago. We have been acquiring properties as our  
16 business expands.

17 THE CHAIRMAN: I appreciate that.

18 MR. SCULLY: Initially perhaps 1930 or some  
19 years earlier.

20 THE CHAIRMAN: I was just wondering what coals  
21 you used before that?

22 MR. FISHER: We used coals that were purchased  
23 in the open market, coking coals coming from the same  
24 areas that our present coals come from.

25 THE CHAIRMAN: In your plant you have always  
26 used United States coal?

27 MR. FISHER: In our plant we have always used  
28 American coal, yes.

29 THE CHAIRMAN: And the qualifications that you  
30







1 make against the Eastern coal are sulphur and -----

2 MR. FISHER: Coking properties.

3 THE CHAIRMAN: You are not troubled with ash?  
4 Ash doesn't enter into that?

5 MR. FISHER: No. The ash content is quite  
6 within the range that is acceptable.

7 THE CHAIRMAN: But its quality does not hold  
8 up under construction?

9 MR. FISHER: The factor is that with the  
10 undesirable chemical features represented by the  
11 sulphur it becomes uneconomical. The production of  
12 the blast furnace is substantially reduced because  
13 of the need to reduce and eliminate the sulphur.  
14 The coking characteristics of the coal means that the  
15 use of the resultant coke in the blast furnace also  
16 makes the whole process uneconomical. There is a  
17 break down of the coke itself within the blast furnace  
18 itself which doesn't support the burden of the blast  
19 furnace. The result is the production is reduced.

20 THE CHAIRMAN: That is, it is uneconomical  
21 in the characteristic of the coal?

22 MR. FISHER: That is right.

23 THE CHAIRMAN: You are not touching any  
24 question of price there?

25 MR. FISHER: No, it is a matter of production  
26 in the whole metallurgical operation.

27 THE CHAIRMAN: If your plant were at Sydney,  
28 what would you say?

29 MR. FISHER: Again the matter of economics  
30





1 does come in there because the coal is immediately  
2 available and other sources of coal are not nearly  
3 as readily available.

4 THE CHAIRMAN: Evidently in some way or other  
5 they make use of coal for coking purposes?

6 MR. FISHER: That is right, sir. Their  
7 production rates are substantially below ours in  
8 the blast furnace operation, which is the criteria.

9 THE CHAIRMAN: You think from this point of  
10 view of quality of coal, yours is more efficient?

11 MR. FISHER: Yes sir.

12 THE CHAIRMAN: More suitable for the steel  
13 production?

14 MR. FISHER: It definitely is.

15 MR. GUNN: Did I understand you to say that in  
16 1937 was the last time that Cape Breton coal was  
17 tested?

18 MR. FISHER: At the Hamilton By-Product  
19 Company, yes sir.

20 MR. GUNN: No test made since that time to  
21 your knowledge?

22 MR. FISHER: No, there has not been.

23 MR. GUNN: Could there be, in your opinion,  
24 any changes do you think with reference to the coal?

25 MR. FISHER: The only change that we have seen  
26 is that the sulphur content is now higher than it was  
27 at that time.

28 MR. GUNN: How did you find that out?

29 MR. FISHER: Well simply by information that  
30







1 is available in some papers that have been published.

2 MR. GUNN: Not through any tests that you have  
3 made yourself?

4 MR. FISHER: No, we have not made any test.

5 MR. GUNN: Now then, at page 7 of your brief,  
6 which is Exhibit 9, :-

7 "The lack of suitable Canadian coal available  
8 to Hamilton long ago compelled the Company  
9 to invest in and develop extensive coal  
10 properties in Pennsylvania and West Virginia  
11 in order to assure a continuing supply of  
12 high quality metallurgical coal."

13 Does your company own those pits in the United States?

14 MR. SCULLY: We own one mine 100%. In  
15 co-operation with other American Steel producers we  
16 have substantial interests in their other coal  
17 producing properties.

18 MR. GUNN: Well now the one there that you  
19 own outright, is that operated by your company or is  
20 it operated by an American concern?

21 MR. SCULLY: Well it's a subsidiary.

22 THE CHAIRMAN: You spoke of the high  
23 mechanization in those mines, and I assume it has  
24 brought it to the efficiency and production -- the  
25 figures show that. I was just wondering what are some  
26 of the features. What is the depth generally in those  
27 mines in which you are interested? What depth of seam?

28 MR. SCULLY: I think I will have to ask Mr.  
29 Fisher to give you that.





1 MR. FISHER: I can't answer that specifically.

2 THE CHAIRMAN: Just roughly.

3 MR. FISHER: They vary substantially in the  
4 various mines.

5 THE CHAIRMAN: Take your own, now roughly what  
6 is the depth?

7 MR. FISHER: I can't tell you that sir.

8 MR. SCULLY: I think perhaps five hundred feet.  
9 Something of that order. We can get that information.

10 THE CHAIRMAN: Yes, well that is sufficient  
11 for my immediate purpose. Now what is the thickness  
12 of the seam?

13 MR. FISHER: I am not thoroughly familiar with  
14 the operation of our coal mines.

15 THE CHAIRMAN: I was just wondering.

16 MR. SCULLY: I have been in the mine Mr.  
17 Commissioner, and of course this is not an expert  
18 opinion.

19 THE CHAIRMAN: That is quite all right. You  
20 may give it to us in detail later.

21 MR. SCULLY: I will sir. I myself was in when  
22 the seams were thicker than I am this way. (indicating)  
23 I think somewhere between six and nine feet.

24 THE CHAIRMAN: I was just thinking about the  
25 features of the mining there, including all conditions  
26 which were so conducive to high mechanization and  
27 efficiency. How would you express those features in  
28 contrast to what perhaps are the conditions in Nova  
29 Scotia?  
30







1 MR. SCULLY: I am afraid I can not answer that.  
2 We can get for you specific answers to questions like  
3 that from experts who operate our mines for us, but  
4 generally speaking that is just an observation and  
5 from what I have heard the mines in Pennsylvania  
6 and West Virginia lend themselves better to modern  
7 mining methods.

8 THE CHAIRMAN: That seems to be the case.  
9 I was wondering what was the condition.

10 MR. SCULLY: I think it is probably because  
11 of the depth of the seam, thickness of the seam.

12 THE CHAIRMAN: Thickness of the seam. What  
13 generally is the pitch?

14 MR. SCULLY: I am afraid I can not answer that.  
15 I would just be guessing.

16 THE CHAIRMAN: I was wondering whether that  
17 depended upon the thickness, the depth, the pitch  
18 or any other special conditions. I was wondering  
19 whether we could have a bit of enlightenment on that.

20 MR. SCULLY: I would be very happy to have  
21 some gentleman come at another time who is very well  
22 informed on that subject, if you would like that.

23 THE CHAIRMAN: If you could furnish that  
24 information by letter.

25 MR. SCULLY: Very glad to do that.

26 THE CHAIRMAN: Because there is that question  
27 as your figures show, the question of much greater  
28 production through mechanization.

29 MR. SCULLY: Yes sir. These figures are  
30





1 average figures from one of our mines in Pennsylvania.  
2 The output per man figure is up around 18 to 20 tons.  
3 That is a brand new mine, a mine which was developed  
4 in recent years.

5 THE CHAIRMAN: This seems to have kept pace  
6 with the average throughout the American bituminous  
7 field?

8 MR. SCULLY: Yes.

9 THE CHAIRMAN: And what I am after is the  
10 conditions permitting that in contrast to those which  
11 do not seem to permit it in this country.

12 MR. SCULLY: I would be very happy to see what  
13 I can get for you and send it to you.

14 THE CHAIRMAN: Thank you. I was wondering  
15 whether the company exports much of its products?

16 MR. SCULLY: No.

17 THE CHAIRMAN: Chiefly the Canadian market?

18 MR. SCULLY: Practically entirely. There are  
19 times when we do, but tonnage wise it is not important.

20 THE CHAIRMAN: What is the situation in the  
21 past, that is the tariff on steel entering Canada.

22 MR. FARRELL: Mr. Commissioner, the instance  
23 of Canadian tariff on rolling mill products probably  
24 works out to 7% on a weighted / - approximately 7%.

25 However, we have found that Hamilton prices to-day  
26 are the same as in Pittsburgh indicating that we are  
27 not resting behind the tariff to protect us from the  
28 American market.

29 THE CHAIRMAN: Definitely then you seem to  
30







1 have pretty much the same situation in relation to the  
2 manufacture of steel as your Pittsburgh steel manufact-  
3 ures.

4 MR. FARRELL: I think our operating results  
5 have compared very well.

6 THE CHAIRMAN: And your raw materials, lime,  
7 ore, coal, seem to be as accessible?

8 MR. FARRELL: Yes.

9 THE CHAIRMAN: And as cheap?

10 MR. FARRELL: Yes, sir.

11 MR. GUNN: And the system of mining in the pits  
12 you are interested in in the United States is the  
13 room and pillar or long wall.

14 MR. FARRELL: Room and pillar.

15  
16 MR. GUNN: In all the pits that you are  
17 interested in?

18 MR. SCULLY: I wouldn't like to answer that.  
19 I don't know.

20 MR. GUNN: Would you also put that on any  
21 information that you will be giving to the Chairman,  
22 please?

23 MR. SCULLY: Yes indeed.

24 MR. GUNN: Would you have somebody here who  
25 might answer this question: To describe the  
26 characteristics of steel containing sulphur and is  
27 sulphur more harmful in steel sheeting than in other  
28 forms of steel? Would there be somebody who could  
29 answer that question?  
30





1 MR. FISHER: The sulphur has an embrittling  
2 effect upon steel. It has also an effect upon its  
3 formability characteristics and it is more detrimental  
4 in products such as sheet steel where the formability  
5 and ductility characteristics are so important,  
6 so we must in almost all outlets in sheet steel  
7 products keep the sulphur to a minimum, down to about  
8 .025% sulphur in order to satisfy our customers  
9 with respect to that characteristic.

10 Now another effect is the ability of the steel  
11 to resist a certain degree of corrosion, such as the  
12 tin canning industry and that amount of sulphur does  
13 have a detrimental effect.

14 THE CHAIRMAN: That is the percentage in the  
15 steel?

16 MR. FISHER: That is the percentage in the steel  
17 itself, yes.

18 THE CHAIRMAN: What is your per cent of sulphur  
19 in your coal?

20 MR. FISHER: Our coal used for cooking purposes  
21 our high volatile coal runs about 1.65 % sulphur.

22 THE CHAIRMAN: What is the maximum that you  
23 could use?

24 MR. FISHER: We feel that that is the maximum  
25 that we could use and get an economical and satisfactory  
26 blast furnace operation. Our sulphur in coal run  
27 quite high in relation to what the steel industry  
28 use generally for coking purposes.

29 MR. GUNN: Now you have told us the output  
30







1 per ton per man per day from your pits, which is quite  
2 high, which no doubt results from the mechanization  
3 which has been introduced in the pits. Did you tell  
4 us what the output was prior to the introduction of  
5 the mechanized machinery?

6 MR. SCULLY: I haven't got that information  
7 here, but I would be very glad to get that. In one  
8 of the mines it started out as a full mechanical  
9 operation; our brand new operation came in in the  
10 last seven or eight years.

11 THE CHAIRMAN: Which year was that?

12 MR. SCULLY: Seven or eight years ago. I am  
13 not sure. It never did have a non-mechanized existence.  
14 The others I should think, did have. I will be very  
15 happy to get that information for you.

16 THE CHAIRMAN: Will you do that please?

17 MR. SCULLY: Yes.

18 THE CHAIRMAN: So seven or eight years ago  
19 you were able to take advantage of the experience in  
20 mechanization in mining generally up to that time?

21 MR. SCULLY: That is right.

22 THE CHAIRMAN: How does that mine compare with  
23 those that were commenced in another period?

24 MR. SCULLY: It is still a better mine.

25 THE CHAIRMAN: Better from the standpoint  
26 of effective mining?

27 MR. SCULLY: That is right.

28 THE CHAIRMAN: The coal conditions and the  
29 accessibility are not material factors of difference?  
30





1 MR. SCULLY: I think the coal methods,  
2 actually they are very very similar.

3 THE CHAIRMAN: That is what I mean, there is  
4 no outstanding difference.

5 MR. SCULLY: There is no outstanding difference  
6 between the two mines. They are from the same seam,  
7 from the Pittsburgh seam, and the characteristics are  
8 very similar.

9 THE CHAIRMAN: So the improvement comes from  
10 your initial method of extraction?

11 MR. SCULLY: That is right sir.

12 THE CHAIRMAN: And you were able in the light  
13 of experience to make that as great as the knowledge  
14 at that time would permit, including mechanization?

15 MR. SCULLY: It was a very important factor.

16 THE CHAIRMAN: Are you in a position to tell  
17 us the average, the analysis of your coking coals  
18 or if someone here that might be able to do that?

19 MR. FISHER: The average sulphur analysis  
20 of our coking coal runs about 1.6% sulphur. Now  
21 we plan about 16% low volatile coal in that, and our  
22 high volatile coal and it runs about .8% sulphur over  
23 that. The average is probably about  $11\frac{1}{2}\%$  to 1.55%  
24 sulphur in our mix. That is generally a day to day  
25 analysis.

26 MR. GUNN: And another question; you may  
27 be able to answer this one, too. How much coal  
28 per year does your company use apart from metallurgical  
29 coking coal?  
30







1 MR. FISHER: I would say probably about 25 thousand,  
2 30 thousand tons of steam coal, but it is diminishing very  
3 rapidly.

4 MR. GUNN: And that would be American coal,  
5 would it not?

6 MR. FISHER: That is American coal.

7 MR. GUNN: Why would it be diminishing now?

8 MR. FISHER: Well, we have dieselized  
9 completely as far as our steam engines are concerned  
10 in our basic plant and our crane operations, and most  
11 of the boilers we use in our finishing plant have  
12 been changed over to fuel oil. We use very little  
13 coal now.

14 MR. GUNN: About how much fuel oil would you  
15 be using?

16 MR. FISHER: Well, it ran into millions of  
17 gallons. Now, I can give you that.

18 MR. SCULLY: Do you want that figure?

19 MR. GUNN: Yes, sir.

20 Perhaps you can answer this question, sir.  
21 There is now a draw-back in the tariff imposed on  
22 coking coal in making coke in the manufacture of  
23 iron and steel. Could you tell us what benefit your  
24 operations get from this draw-back?

25 MR. SCULLY: I am sorry, I can't answer that.

26 MR. GUNN: Could you get us that if it is not  
27 too much trouble?

28 MR. SCULLY: No trouble.

29 MR. GUNN: Again coming back to your coal pits  
30





1 in the United States, would you have any idea as to  
2 what the coal reserves now amount to or how long you  
3 expect them to last at the present rate of your  
4 consumption?

5 MR. SCULLY: It is impossible to answer that  
6 question specifically now. They are extensive, but  
7 they vary. We have, as I said, an interest in four  
8 properties, and the lives of these properties are  
9 different. They would vary, I would think, from  
10 twenty years to perhaps one hundred years.

11 MR. GUNN: And is that information based upon a  
12 reliable authority when you say from twenty to one  
13 hundred years, because that is quite a spread?

14 MR. SCULLY: We have this information if it is  
15 important, and we can provide it to you.

16 MR. GUNN: Would you do that, please?

17 MR. SCULLY: Yes.

18 THE COMMISSIONER: Do you say that is adequate  
19 for your purposes for an indefinite period?

20 MR. SCULLY: Yes and no. In our business,  
21 expanding as it is, we are looking constantly for new  
22 sources for the very long term. We have been quite  
23 happy with our position for a long number of years,  
24 but not indefinitely.

25 MR. GUNN: I think that is all, Mr. Chairman.  
26 Thank you.

27 THE CHAIRMAN: Any questions at all?

28 Well, thank you, President and gentlemen, for  
29 your information.  
30







1 THE SECRETARY: Mr. Commissioner, I should like  
2 to enquire if Mr. C.W.Drake of the Algoma Steel  
3 Corporation is present.

4 MR. DRAKE: Yes.

5 THE SECRETARY: Mr. Commissioner, this brief  
6 will be recorded as Exhibit number 10.

7  
8 ---EXHIBIT No. 10

Brief of Algoma Steel  
Corporation, Limited.

10  
11 SUBMISSION BY

12 ALGOMA STEEL CORPORATION LIMITED.

13  
14 APPEARANCES:

15 Mr. C.W.Drake,

The Divisional Superintendent  
and the Director of Coal.

16  
17 MR. DRAKE: The Management of Algoma Steel,  
18 Canada's largest producer of pig iron and coke,  
19 appreciates the opportunity of presenting to the  
20 Commission various pertinent factors relative to the  
21 selection and quality of coals necessary for the  
22 production of sound metallurgical coke.

23 Algoma Steel Corporation, Limited, located at  
24 Sault Ste. Marie, is a fully integrated iron and steel  
25 manufacturer having an annual coke capacity of 1,458,000  
26 tons; 1,500,000 tons of iron, and 1,600,000 tons  
27 of steel ingots which are further processed into a  
28 variety of finished products, among which are plate,  
29 sheet and strip, structurals, rails, merchant bars,  
30





and others.

In the production of coke, Algoma ~~uses~~ coal mined by its wholly owned subsidiaries in Cannelton and Superior, both located in West Virginia. These mines provide high and low volatile bituminous coals, a blending of both types being essential in the manufacture of coke metallurgically suitable for the production of iron by the blast furnace process.

In addition, at full operation, Algoma purchases about 20% of its coal requirements from mines situated in close vicinity to the Corporation's West Virginia holdings. By this means close control is maintained over the physical and chemical properties of the "outside" coal thus purchased and the coking characteristics of same are kept compatible with the coals mined by the Corporation.

During the past 10 year Algoma has, on the average, used 1,650,000 N.T. of coal per year and in 1959 consumed a total of 1,850,000 N.T., consisting of 1,385,000 tons of high volatile and 465,000 tons of low volatile coal, the average analyses of which has been -

	<u>Moisture</u>	<u>Vol.Matter</u>	<u>F'Carbon</u>	<u>Ash</u>	<u>Sulphur</u>	<u>-1/8</u> <u>Screen</u>
10 Year Avg.	5.4%	30.84	63.12	6.04	.81	80.3
1959	6.0	30.60	63.90	5.50	.76	80.2

-1/8 Screen refers to the preparation, sizing of the coal prior to its introduction to the elements,







1 and that has been maintained at 80.3 and 80.2.

2 These figures are put in to show the  
3 improvement in analyses, principally of ash and sulphur  
4 in the coal over that period.

5 In the 10 year period substantial improvement  
6 in the quality of coal has been experienced. On the  
7 average, the ash content has been reduced by 18%,  
8 the sulphur content by 6.2% and the carbon content  
9 has been commensurately increased. Any variation in  
10 daily analyses encountered has been negligible.

11 Such is of paramount importance since the production  
12 of high quality metallurgical coke necessitates  
13 the availability of good coal analyses consistently  
14 day by day, as opposed to coals showing good average  
15 analyses over a given period.

16 The importance of high grade coke to blast  
17 furnace operations cannot be under-estimated. To  
18 achieve optimum economy, coke of high carbon, low ash,  
19 and low sulphur, are the first chemical qualifications  
20 required. The occurrence of high ash and sulphur  
21 in the coke means less carbon content, an essential  
22 on which blast furnace depends for the generation  
23 of heat and reducing gases.

24 Ash is an inert material and the higher the ash  
25 content in the coke the greater the amount of limestone  
26 required to support the blast furnace operation.  
27 This is reflected by increased slag volume per ton  
28 of iron produced which again requires additional  
29 coke, thus decreasing furnace production and cost  
30





1 efficiency.

2 Sulphur is also a very undesirable element in  
3 the blast furnace burden. Since in modern blast  
4 furnace operations some 80% of the sulphur charged  
5 in the blast furnace is contained in the coke, full  
6 control of this element must be established in coke  
7 quality. If this is not maintained, the additional  
8 sulphur present in the coke necessitates the use  
9 of increased limestone. The latter causes chemical  
10 and mineralogical changes in slag composition which  
11 can retard blast furnace reaction, reduce production  
12 and adversely affect economic operations. In  
13 addition, the higher the sulphur content in the blast  
14 furnace charge materials, the greater the difficulty  
15 in controlling sulphur content in the iron produced  
16 within established specified limits. Such can result  
17 in the increased production of high sulphur irons which  
18 are neither acceptable in the Trade for merchant iron  
19 use nor for steelmaking purposes.

20 In 1950 the ash content in the coals used at  
21 Algoma averaged 6.7% with a coke consumption at a rate  
22 of 1,672 pounds per ton of iron produced, while in  
23 1959, with an average ash content of 5.50%, the coke  
24 used to produce a ton of iron was reduced to 1,432  
25 pounds. Although the beneficiation of iron bearing  
26 materials was partly responsible for this increased  
27 efficiency, the results shown could not have been  
28 attained if the chemical and physical qualities of the  
29 coke had not been improved.  
30







1           In addition to the foregoing chemical  
2 requirements in coals and coke, it must also be  
3 emphasized that coals must exhibit certain uniform  
4 coking characteristics. These coking properties in  
5 coals exert strong influences on the physical  
6 qualities of the coke produced including such factors  
7 as combustibility, stability, porosity, and strength.  
8 During recent years increased attention has been given  
9 to the control of the physical as well as the chemical  
10 properties of coke in order to ensure that greater  
11 operational efficiencies are attained. Elaborate  
12 testing procedures common to the Trade have been  
13 established to measure such physical qualities.  
14 At Algoma Steel, in addition to the daily coal  
15 and coke tests undertaken, considerable work and  
16 research has been done on the coking properties of  
17 coals. This has involved the use of a test oven in  
18 which the behaviour of coal during the coking  
19 process can be scientifically examined and measured.  
20 This testing procedure has been of considerable value  
21 in the selection of coals to obtain metallurgical coke  
22 of the best quality and thus promote greater efficiencies  
23 in blast furnace operation.

24           Having recognized the benefits to be achieved  
25 in blast furnace operations through the close control  
26 of the foregoing physical and chemical properties of  
27 the raw materials employed, heavy capital expenditures  
28 have been made at Algoma's coal subsidiaries. The  
29 pyramiding of wages paid to the coal miners made  
30





1 necessary the adoption of a high degree of  
2 mechanization for coal extraction. Mechanization,  
3 however, created the additional problem of refuse  
4 inclusion which is inherent in the substitution of  
5 machinery for man-power. It, therefore, became  
6 necessary to also instal coal cleaning facilities  
7 to provide beneficiation of product essential to  
8 maintain the required degree of purity, to which earlier  
9 reference has been made. With regard to the above, it  
10 is worthy of note that almost \$10,000,000 has been  
11 invested in the Corporation's coal mining properties.

12 As may be concluded, ownership of these  
13 properties is a decided advantage in that the coal is  
14 being tailored to the Steel Works' requirements.  
15 The assurance of continuity of supply, reserves  
16 of which now extend some 40 years with further  
17 exploration continuing, is also of paramount importance.

18 In considering the use of Canadian coals, it  
19 is Algoma's opinion, that, apart from any consideration  
20 relative to delivery costs which we do not believe  
21 would be favourable, present coal quality standards  
22 could not be met. With regard to the use of high  
23 ash, high sulphur coals typical of Western and  
24 Maritime coals respectively, it can only be assumed  
25 that a corresponding adverse effect on the advantages  
26 already gained through the improvement of raw  
27 materials, would result. It is also questionable whether  
28 the coking characteristics of these coals, would  
29 measure up to acceptable standards for the production  
30







1 of high quality metallurgical coke. At present  
2 sufficient information is not in hand to draw any  
3 definite conclusions, but we merely note our further  
4 interest in this regard.

5 As a large consumer of coking coals for the  
6 manufacture of iron and steel we know by experience  
7 that the selection of coals used in the manufacture  
8 of metallurgical coke is of vital importance.

9 In our judgment, the use of Canadian coals would do  
10 nothing to enhance our present position, but on the  
11 contrary would pose problems seriously affecting  
12 our metallurgical practice.

13 The desirability of developing the full  
14 potential of the Canadian market for Canadian coals  
15 is recognized and highly commendable. To that end,  
16 no doubt, much exploratory work remains to be  
17 undertaken. We will follow with interest the results  
18 of any future investigations and stand ready to offer  
19 a degree of assistance in this regard where our  
20 testing facilities may be used to any possible  
21 advantage. We must, however, in conclusion state  
22 that we can foresee little likelihood of Canadian  
23 coals being able to compete on an equitable basis in our  
24 operations with the high quality coals presently  
25 used, and which we have attempted to show play an  
26 important role in achieving a high standard of  
27 metallurgical and operating efficiency.

28  
29 Thank you, Mr. Chairman.  
30





1 MR. GUNN: Just in line with your brief, which  
2 is Exhibit 10, and you ended up there:

3 "We must, however, in conclusion state that  
4 we can foresee little likelihood of Canadian  
5 coals being able to compete on an equitable  
6 basis in our operations with the high quality  
7 coals presently used, and which we have  
8 attempted to show play an important role in  
9 achieving a high standard of metallurgical  
10 and operating efficiency."

11 Is there any possibility under present-day  
12 methods of getting the sulphur out of the coal?

13 MR. DRAKE: Do I understand your question?  
14 Present-day methods of exacting sulphur from coal?

15 MR. GUNN: Yes, in order that the coal then  
16 could be used in a satisfactory manner in the  
17 metallurgical processes.

18 MR. DRAKE: I think I must answer that question  
19 in the negative from the standpoint of Eastern coal.  
20 Sulphur is largely inherent, and I believe the sulphur  
21 extraction is as thorough as it can be made.

22 MR. GUNN: Does that also apply to Western  
23 coals?

24 MR. DRAKE: Western coals on the whole, so far  
25 as I know, do not have a particularly high sulphur  
26 content. I think offsetting the sulphur in the  
27 Eastern coals is primarily ash.

28 MR. GUNN: As I understand from your brief, the  
29 possibility of the purchase by your company of Eastern  
30





1 coals is practically nil.

2 MR. DRAKE: Yes, sir.

3 MR. GUNN: And that also applies to Western  
4 coals as well?

5 MR. DRAKE: We feel so, yes.

6 MR. GUNN: Then on page 1 of your brief you say:

7 "In addition, at full operation, Algoma  
8 purchases about 20% of its coal requirements  
9 from mines situated in close vicinity to the  
10 Corporation's West Virginia holdings."

11 Now, does your company own any mines in the  
12 United States?

13 MR. DRAKE: Yes, sir.

14 MR. GUNN: How many?

15 MR. DRAKE: We own two properties, one in  
16 the so-called gaseous fields, which is located at  
17 Cannelton, West Virginia, and the other is the  
18 Pocahantas mine, located in the western part of the  
19 States.

20 MR. GUNN: Are those operated by your company?

21 MR. DRAKE: Yes, wholly-owned subsidiaries.

22 MR. GUNN: Are these two pits of yours highly  
23 mechanized?

24 MR. DRAKE: Yes. The Cannelton mine is,  
25 I would say, almost completely mechanized; ~~the~~  
26 mechanization is somewhat less in the Pocahantas  
27 mine, but is still considerable.

28 MR. GUNN: And the output per ton per man per  
29 day would be roughly what, sir?  
30







1 MR. DRAKE: Well, I would say in the order of  
2 12 to 14 tons.

3 MR. GUNN: And this, of course, flowed from the  
4 introduction of mechanical devices in the pits?

5 MR. DRAKE: That is true.

6 MR. GUNN: Do you know what the output would  
7 be prior to the introduction of the mechanical methods?

8 MR. DRAKE: I am only going to guess now,  
9 but I would say in the order of 5 or 6 tons.

10 MR. GUNN: How much coal does your company  
11 use per year outside of the use in metallurgical  
12 processes?

13 MR. DRAKE: The only other use we have for it  
14 is for steam-raising purposes. We are completely  
15 dieselized, and gas and oil have largely pre-empted  
16 the use of coal other than for the generation of steam,  
17 and even there we use a large quantity of gas as fuel.  
18 So that our estimated consumption of steam coal, which,  
19 as I understand, you are interested in, would be in the  
20 order of 20,000, 25,000 tons at the present time.

21 MR. GUNN: And that is decreasing.

22 MR. DRAKE: That is decreasing.

23 MR. GUNN: Do you use any Canadian coal at all  
24 in any of the processes or steam heating in your  
25 operation?

26 MR. DRAKE: No, sir.

27 MR. GUNN: Purely American?

28 MR. DRAKE: Yes.

29 MR. GUNN: I did ask the question of one of  
30





1 the gentlemen of the Steel Company of Canada. I am  
2 going to ask it of you now. There is now a draw-  
3 back on the tariff imposed on coking coal in making  
4 coke in the manufacture of iron and steel. Can you  
5 tell us what the benefit is to your operations of  
6 this draw-back?

7 MR. DRAKE: My first reaction to that would  
8 be in direct proportion to the amount of the draw-back.  
9 Did I understand your question? Perhaps not.

10 MR. GUNN: My question is, there is now a  
11 draw-back on the tariff imposed on coking coal in  
12 making coke in the manufacture of iron and steel.  
13 What is the benefit to your operations of this draw-  
14 back?

15 MR. DRAKE: Naturally it gives us cheaper  
16 coal and affects in proportion the cost of our  
17 operations.

18 THE CHAIRMAN: What percentage of the duty is  
19 the draw-back?

20 MR. DRAKE: I should know that. I believe  
21 it is 99%.

22 THE CHAIRMAN: That would be approximately  
23 fifty cents a ton?

24 MR. DRAKE: Yes, sir.

25 MR. GUNN: I think that is all I have to ask.  
26 Thank you, Mr. Chairman.

27 THE CHAIRMAN: I have a few questions, Mr.  
28 Drake, I would like to put to you.

29 You expressed agreement and desirability  
30







1 of making some use of Canadian coals. Now, you  
2 exclude the question of efficient use for the  
3 purposes of metallurgy. What would you suggest as a  
4 means of making use of Canadian coals in this  
5 part of Canada?

6 MR. DRAKE: Well, sir, we are not prepared to  
7 say that as far as --

8 THE CHAIRMAN: You say it was highly  
9 commendable. I was wondering what you had in mind,  
10 whether this was a sort of pious expression.

11 MR. DRAKE: I don't feel Canadian coals have  
12 any place in our operations from an economic standpoint,  
13 but we do feel that Canadian coals can possibly be  
14 developed for sale disposition in other areas to  
15 advantage.

16 THE CHAIRMAN: What areas?

17 MR. DRAKE: For instance, at the present time  
18 there is some consideration of exporting to Japan;  
19 I believe some mines have done work in that regard.

20 THE CHAIRMAN: You mean for metallurgical  
21 purposes?

22 MR. DRAKE: Yes. However, they are faced  
23 with the position of having no good metallurgical  
24 coals at hand, and location on the west coast could  
25 make a good deal of difference.

26 THE CHAIRMAN: The Western coal, you would  
27 think, would have the quality, more nearly the  
28 quality than the Eastern for that purpose.

29 MR. DRAKE: We feel so, judging from the  
30





1 fact that they are relatively - have been ~~shown~~ to be  
2 relatively reasonably good coking coals, at least  
3 some of them, plus the fact that they are relatively  
4 low in sulphur. Now, we don't think - we are quite  
5 sure they are not as good as the coals we are  
6 using. However, we don't consider that the door  
7 is closed to Canadian coals for metallurgical  
8 purposes.

9 THE CHAIRMAN: Have you any idea of the  
10 amount that is contemplated to be shipped to Japan?

11 MR. DRAKE: We have not, sir. We have  
12 attempted to show that we are quite prepared to  
13 go along with the Bureau of Mines for further  
14 consideration of Canadian coals for metallurgical  
15 purposes.

16 THE CHAIRMAN: As far as you can see  
17 there is no possibility of being able to absorb  
18 Canadian coal in your plant.

19 MR. DRAKE: I cannot, sir.

20 THE CHAIRMAN: You speak of the productive  
21 standing of your mines in West Virginia. Are you  
22 familiar with those mines?

23 MR. DRAKE: Reasonably so.

24 THE CHAIRMAN: What is the average depth?

25 MR. DRAKE: The mine from which we get the most  
26 tonnage, the Cannelton Mine, which is a high volume  
27 gas-coal mine, is a drift mine; it is located on  
28 the side of a hill and we drive right in there.

29 THE CHAIRMAN: What is the slope?  
30





1 MR. DRAKE: There is relatively little slope.  
2 The undulations, of course, cause some deviation from  
3 the level.

4 THE CHAIRMAN: What is the over burden?

5 MR. DRAKE: The over burden is a mountain.

6 THE CHAIRMAN: Are these all underground  
7 workings?

8 MR. DRAKE: Yes.

9 THE CHAIRMAN: Is the whole mine under the  
10 mountain?

11 MR. DRAKE: Yes.

12 THE CHAIRMAN: Are you familiar with any of  
13 the Canadian mines in the East?

14 MR. DRAKE: I am not, sir.

15 THE CHAIRMAN: What depth would you say under  
16 the average level of that terrain there? What  
17 would you say would be the depth of the seams there  
18 in that area, within a hundred or so feet? Are  
19 they down a thousand feet?

20 MR. DRAKE: You mean from the top of the  
21 terrain?

22 THE CHAIRMAN: This isn't table land, is it?

23 MR. DRAKE: No, it is completely mountainous  
24 country. Actually the only useable portion of it is  
25 the valley.

26 THE CHAIRMAN: The surface undulates as well  
27 as the seams?

28 MR. DRAKE: Yes.

29 THE CHAIRMAN: What would be the average depth  
30







1 of the over burden?

2 MR. DRAKE: I would guess perhaps a thousand  
3 feet. I would imagine about eight hundred to a  
4 thousand feet, perhaps, on the average.

5 THE CHAIRMAN: What is the depth of the seam  
6 on the average?

7 MR. DRAKE: The depth of our seams in the  
8 gas-coal varies from approximately 30 inches to  
9 a maximum of about 42 inches.

10 THE CHAIRMAN: Is that relatively thin?

11 MR. DRAKE: Present mining, no; it is  
12 reasonably good thickness of seam.

13 THE CHAIRMAN: Would you say that is the  
14 average in West Virginia?

15 MR. DRAKE: I couldn't say as to that. The  
16 average of seams - it probably would be reasonably  
17 close.

18 THE CHAIRMAN: Does it lend itself easily to  
19 mechanization?

20 MR. DRAKE: Yes, that mine does, except for  
21 the very low coal, which is the 30 inch coal; we  
22 cannot completely mechanize in that coal. In other  
23 words, the continuous mining of the seams has not been  
24 developed to the same degree.

25 THE CHAIRMAN: Are you familiar with the type  
26 of miner that is used in Cape Breton?

27 MR. DRAKE: I am not, no sir.

28 THE CHAIRMAN: What is the type that you use?  
29 Generally describe it.  
30





1 MR. DRAKE: Well it is the same, similar to the  
2 chain saw principle in that it carries it to the  
3 pits on a rotating chain which will contact with the  
4 face coal, undercut the coal.

5 THE CHAIRMAN: You undercut it?

6 MR. DRAKE: With the machine which we use.  
7 I am not speaking now of the continuous miner. This  
8 is a cutting machine. The continuous miner works  
9 on the same principle.

10 THE CHAIRMAN: You are more familiar with  
11 this than I am. What you are speaking of is two  
12 types of cutting operations?

13 MR. DRAKE: That is true. One where we do not  
14 use the continuous miner. We merely undercut the coal  
15 and then put in an explosive charge to break the coal  
16 down for loading. That is the machine that works  
17 on somewhat the principle of a chain saw.

18 THE CHAIRMAN: That is for undercutting?

19 MR. DRAKE: That is true. Now the continuous  
20 miner is somewhat the same principle but on a larger  
21 scale, but it actually takes the coal out of position,  
22 all of the coal. We do not resort to explosive  
23 charges for the use of that.

24 THE CHAIRMAN: At the most you only have  
25 40 inches.

26 MR. DRAKE: About 42 inches.

27 THE CHAIRMAN: To take that out. Is there  
28 much breakage accompanying that?

29 MR. DRAKE: There is a great deal of  
30







1 degradation in that sort of mining.

2 THE CHAIRMAN: What about that? Do you use  
3 that coal as run of mine too?

4 MR. DRAKE: This coal has to go through  
5 beneficiation plant.

6 THE CHAIRMAN: What about separating the  
7 fines?

8 MR. DRAKE: We don't in the gas coal. It is  
9 all washed, one component, dried and crushed to a  
10 size of two inches or less and loaded. The entire  
11 production is loaded as one product.

12 THE CHAIRMAN: That is two inches or less.  
13 Is that what you take to the plant?

14 MR. DRAKE: Yes sir.

15 THE CHAIRMAN: What about larger sizes?

16 MR. DRAKE: It is all crushed to that size.  
17 Depression is necessary to get the maximum benefits  
18 from washing.

19 THE CHAIRMAN: Which is?

20 MR. DRAKE: Depression of the coal.

21 THE CHAIRMAN: Where is that done? How is  
22 that done?

23 MR. DRAKE: The coal is mined, goes over  
24 screens and the other size goes into crushers, crushed  
25 down to a size of two inches.

26 THE CHAIRMAN: So you reduce it all to two  
27 inches?

28 MR. DRAKE: That is right.

29 THE CHAIRMAN: Well you say generally that above  
30





1 thirty inches that means that mining lends itself to  
2 machine operation. Due to any special features  
3 that you could mention, because ordinarily you can't  
4 introduce large size machines, can you, in that  
5 depth of coal?

6 MR. DRAKE: Well in the narrow coal -- when I  
7 refer to 30 inch coal, machines for that, for mining  
8 that depth of coal have not been developed without the  
9 necessity of taking out a good deal of influx material.

10 THE CHAIRMAN: That is what I had in mind.

11 MR. DRAKE: That development we feel is  
12 proceeding and it is very likely that in a few years  
13 machines capable of working in narrow seam coal will be  
14 available.

15 THE CHAIRMAN: That is all done on the slope?  
16 You said you mine on the slope?

17 MR. DRAKE: In the drift.

18 THE CHAIRMAN: You follow wherever the  
19 drift of the seam is. You follow through?

20 MR. DRAKE: That is right.

21 THE CHAIRMAN: It is undulating you said.  
22 When was that opened? I refer to the mine which you  
23 spoke of as producing the best coal.

24 MR. DRAKE: I believe our Hamilton property  
25 goes back to about the 1900's, when it was first  
26 operating. It became the property of the Algoma  
27 Steel about 1911.

28 THE CHAIRMAN: And had it been developed  
29 before that?  
30





1 MR. DRAKE: It had been. Certain area of the  
2 mine had been worked up.

3 THE CHAIRMAN: And when was the machinery  
4 introduced?

5 MR. DRAKE: The machinery was introduced, well  
6 total mechanization has been in effect I would say  
7 about four years.

8 THE CHAIRMAN: That has been more or less  
9 universal throughout the American mines?

10 MR. DRAKE: Yes sir.

11 THE CHAIRMAN: You spoke of high and low  
12 volatility. What is the result of these two types  
13 of coke?

14 MR. DRAKE: The high volatile coal which we  
15 produced has very good coke making propensities  
16 except that it tends to shrink on ~~coking~~ coking which has  
17 resulted downward characteristics of the coke,  
18 making the coke very small. To offset that we  
19 add low volatile coke which adds to the tendency  
20 to expand in coking. The combination of the two  
21 tendencies gives you more or less neutral coke which  
22 minimizes fissuring and produces larger coke.

23 THE CHAIRMAN: To firm structures?

24 MR. DRAKE: That is true.

25 THE CHAIRMAN: Any questions? (No answer)  
26 Thank you.

27 MR. ELLIS: Mr. Commissioner, the next brief  
28 will be submitted by Mr. Kenneth C. Culham on behalf  
29 of the Canadian Commercial Coal Dock Operators  
30







1 Association, and will be recorded as Exhibit number  
2 11.

3 MR. CULHAM: Mr. Commissioner, Gentlemen, I  
4 am here representing the quite proper but awkwardly  
5 named Canadian Commercial Coal Dock Operators Associat-  
6 ion. We submitted a brief to the Royal Commission  
7 on Energy at their Montreal sittings in July, 1958  
8 and it tells basically the extent of our industry  
9 and outlines the importance of our industry and our  
10 members in the Canadian Commercial Coal Dock  
11 Operators Association and gives quite detailed  
12 information. I would like to suggest to the  
13 Commission that we forego with the reading of that  
14 brief, if that is satisfactory to you.

15 THE CHAIRMAN: First tell us generally the  
16 features.

17 MR. CULHAM: Well perhaps I could sum it up  
18 in this way: Our Association is made up of  
19 approximately 20 operators of commercial coal docks  
20 in the area around the Great Lakes 'from Fort William  
21 to Montreal.

22 THE CHAIRMAN: When you use the word "docks"  
23 what does that word connote?

24 MR. CULHAM: I would say it connotes a water-  
25 front property with water deep enough alongside to  
26 accommodate whatever types of vessels that are going  
27 into that movement, and whatever area is required in  
28 the light of the full requirements of the area.

29 THE CHAIRMAN: But your operation extends to  
30





1 more than unloading coal?

2 MR. CULHAM: Our function in the economy,  
3 Mr. Commissioner, is that we transport, store and  
4 deliver coal to industrial plants, said industrial  
5 plants also act as a storehouse for retail dealers.

6 THE CHAIRMAN: You bring in the coal as owner,  
7 do you, as importer?

8 MR. CULHAM: Not entirely so. Speaking for  
9 the members of our Association, we do have members  
10 whose business is solely that of operating a dock  
11 and storing and warehousing coal for other members  
12 of our Association, and also for industrial consumers,  
13 as these larger steam companies, and so on that are  
14 located at inland points, not having their own dock  
15 facilities, but who purchase coal in such quantities  
16 that is perhaps cargo lots but that is perhaps more  
17 the exception than the rule.

18 If you care to look at the list of our members,  
19 I know of two, the Lake Erie Coal Company which has  
20 a dock at Erieau, out on Lake Erie and the Century  
21 Coal Company, and I believe that 99% probably of the  
22 coal handled by these companies is handled for other  
23 people as warehousemen.

24 THE CHAIRMAN: Simply coal handlers in that  
25 sense?

26 MR. CULHAM: That is correct. That is two  
27 and there may be others that do not occur to me at the  
28 moment.

29 THE CHAIRMAN: Receive it and store it, that  
30







1 is coal belonging to other persons?

2 MR. CULHAM: Yes sir. Mainly the function  
3 of those companies is to serve as wholesalers such  
4 as the company which employs me, but not necessarily  
5 so. The Canadian Pacific Railway have two docks.  
6 I believe only two, one which is under lease to one  
7 of our member companies, and another one at Little  
8 Current, Manitoulin Island, and they operate those  
9 and any person can arrange for the purchase of a  
10 shipload of coal and have it placed on the dock  
11 and the Canadian Pacific Railway will handle it,  
12 store it for them and load it into railway cars  
13 for onward shipment.

14 The International Nickel Companies purchase  
15 all their coal in that fashion. It is placed on  
16 docks owned by Canadian Pacific Railways, operated  
17 by Century Coal Company, and shipped on the instructions  
18 of International Nickel Company to their plant at  
19 Copper Cliff, so that the particular function then  
20 of our members is very practically effected by not  
21 only seasonal but temporary measures that might be  
22 taken by our competitors. We feel the dock industry-----

23 THE CHAIRMAN: Who are your competitors?

24 MR. CULHAM: Well the handlers and purveyors  
25 of other types of fuel.

26 THE CHAIRMAN: You mean the competition of  
27 other fuels?

28 MR. CULHAM: Yes.

29 THE CHAIRMAN: Primarily?  
30





1 MR. CULHAM: Primarily -- I don't like to use  
2 the word primarily, sir. I am merely thinking of  
3 International because of the tremendous influx of  
4 natural gas that has come into Ontario.

5 THE CHAIRMAN: I am wondering whether your  
6 association included all of the coal dock operators  
7 on the Lakes?

8 MR. CULHAM: There might be one or two sir,  
9 very small commercial dock operators that are not  
10 members of our organization. I am quite sure it is  
11 not significant. We feel that these commercial  
12 coal docks, as I have represented, is a means of  
13 using an economical method of transportation, which  
14 is the movement of coal to lake ports in the United  
15 States mainly, which is by water, being stored in  
16 these docks, is a function which has meant a great  
17 deal to Ontario and which helped to produce things  
18 cheaply and to raise our standard of living on  
19 the things of which you are much more familiar  
20 than I am.

21 THE CHAIRMAN: What is the extent of your  
22 dockage and your facilities generally?

23 MR. CULHAM: In terms of area of acreage of  
24 properties?

25 THE CHAIRMAN: No, in the term of property  
26 and investment and matters of that sort.

27 MR. CULHAM: We have not inquired of the  
28 members any definitive terms along those lines, as to  
29 the properties, what their total payroll is, what their  
30





1 investment is. It is a pretty substantial amount  
2 of money.

3 THE CHAIRMAN: I assumed that it is.

4 MR. CULHAM: I would say the difficulty of  
5 accumulating any information which we can present here  
6 which would be meaningful is perhaps illustrated by  
7 the fact that in Toronto, for instance, all of the  
8 dock properties which I hope you gentlemen will see  
9 while you are here, which will give you a good  
10 insight into the size of coal docks-----

11 THE CHAIRMAN: I thought you might paint  
12 that in vivid colours.

13 MR. CULHAM: Our coal docks?

14 THE CHAIRMAN: Paint the picture of the  
15 waterfront of Toronto.

16 MR. CULHAM: Well I don't know that it would  
17 make a suitable artistic subject for permanent  
18 inclusion, but it perhaps would ~~leave~~ some idea  
19 of a functional nature with you.

20 This dock property is all owned and has been  
21 developed by the Toronto Harbour Commission so that  
22 our member companies, those of them that are located  
23 in the Toronto area or have operators in Toronto  
24 are lessees only.

25 The same thing occurs in Hamilton. In many  
26 of the smaller places such as Belleville and ports  
27 of that kind the Federal Government develops the  
28 docks and leases them to people such as ourselves,  
29 but there is a considerable amount of dockage that  
30







1 has been constructed by private enterprise where the  
2 nature of the docks and the capacity of the coal  
3 company becomes that much greater.

4 THE CHAIRMAN: What I would like to get is  
5 an idea of the total; the effect of that. That is  
6 to say how many operators are on Lake Ontario. Do  
7 you know? On the Lake area, how far do you go up  
8 to Huron and Superior with these dockage facilities?  
9 Give me an idea of the extent of that.

10 MR. CULHAM: Sir if you will allow me to be  
11 not completely accurate, as I am sure I won't be,  
12 I will try and outline it for you. There are  
13 sizeable docks at Fort William, Port Arthur. Those  
14 docks are owned by the Canadian National and  
15 Canadian Pacific Railways, but ~~are~~ operated by  
16 commercial dock operators.

17 There is quite a good sized dock operation  
18 at Michipicoten, which is a little more than half way  
19 down towards Sault Ste. Marie. From there we go to  
20 Sault Ste. Marie. We have two or three member  
21 companies who are operating small, relatively small  
22 docks. They seem to be quite sizeable to anyone  
23 who has not seen extremely large operations.

24 Now I am referring to commercial coal docks.  
25 Of course the Algoma Steel Company have large dock  
26 facilities there and the old companies, and so on,

27 THE CHAIRMAN: Just your own.

28 MR. CULHAM: From there we go to the docks  
29 that I have referred to, at Little Current on  
30





1 Manitoulin Island. From that we come around to  
2 Midland and then we have such places as Owen Sound,  
3 Meaford and Kincardine, a very small dock operation.  
4

5 I am sure I have missed one or more on Georgian  
6 Bay, and then down to Point Edward which is immediately  
7 adjoining Sarnia, and Sarnia itself. Several coal  
8 docks in the Windsor area, Amherstburg, Kingsville,  
9 Port Burwell, Port Weller, Port Stanley area.

10 THE CHAIRMAN: So you line the lakes?

11 MR. CULHAM: That is right pretty well, and  
12 going along the other way almost any place that you  
13 would notice as you drive through in an automobile  
14 along the north shore of Lake Ontario, Cornwall,  
15 Gananoque, Brockville, Kingston, Oshawa.

16 THE CHAIRMAN: What percentage of the coal  
17 is brought into Ontario from the United States mines  
18 comes in over your docks?

19 MR. CULHAM: I believe that the final report  
20 for 1959 will show about 13 million tons of coal  
21 being imported from the United States; not all by  
22 water, and I would say of that about  $2\frac{1}{2}$  million tons  
23 is handled in let us say relatively smaller lots  
24 only, for, or on account of the members of our  
25 association.

26 THE CHAIRMAN: You mean of that 13 ----

27 MR. CULHAM: About  $2\frac{1}{2}$  million tons.

28 THE CHAIRMAN: --- you bring in  $2\frac{1}{2}$  million?

29 MR. CULHAM: About that.  
30







1 THE CHAIRMAN: The rest comes in by rail?

2 MR. CULHAM: ~~No,~~ the rest comes by water  
3 to such companies as Algoma Steel, Hamilton By-Products,  
4 Dominion Foundries and many other companies such as  
5 Hiram Walker's, Ford Motor Company, who have their  
6 own dock facilities.

7 THE CHAIRMAN: This 2½ million represents  
8 the coal called for by the generality of purchasers,  
9 not specific users?

10 MR. CULHAM: That is right. I am thinking  
11 of the coal that is required to sell to people who  
12 are now in industries in inland communities such as  
13 Guelph and many of them are very sizeable purchasers,  
14 but are customers of our members. I am thinking of  
15 the large cement companies who do not have or are not  
16 located right on the water, and very large industrial  
17 plants.

18 THE CHAIRMAN: Have you included or you have  
19 not included that in the 2½ million?

20 MR. CULHAM: Yes.

21 THE CHAIRMAN: You have included it?

22 MR. CULHAM: Yes.

23 THE CHAIRMAN: That amount comes over your  
24 docks?

25 MR. CULHAM: I think that I am being fairly  
26 accurate.

27 THE CHAIRMAN: How much comes in, generally  
28 speaking, by rail?

29 MR. CULHAM: That is a figure that has escaped  
30





1 my mind. I am very sorry.

2 THE CHAIRMAN: This establishment of dockage  
3 facilities, I suppose, has been going on for many  
4 years?

5 MR. CULHAM: Well yes, I believe that the  
6 first commercial coal dock of any material size in  
7 the Toronto area was probably about thirty years ago.

8 THE CHAIRMAN: Well now I don't know that  
9 you have my question, because Ontario has been  
10 importing coal from the United States long before that.

11 MR. CULHAM: There were docks long before that  
12 sir. I was illustrating that because it has become  
13 the dock areas such as we have in Toronto where coal  
14 is delivered in truck load lots or by rail is a  
15 relatively newer nature.

16 THE CHAIRMAN: I don't mean with the  
17 modern facilities. I mean for the function that  
18 you have described in receiving coal and holding and  
19 distributing it.

20 MR. CULHAM: I would say there have been  
21 docks almost as long as there have been ships to  
22 carry coal, and coal to put in them.

23 I don't know just when the older docks were  
24 constructed. I am sure you will have some other  
25 witness who can speak more adequately on that.

26 We operate a dock ourselves and it has been in  
27 operation for 45 years on the Detroit River and I  
28 think that probably the docks at the Lakehead are of  
29 that era.  
30







1 THE CHAIRMAN: How do you handle coal? Is  
2 the coal unloaded by means of docks or derricks or  
3 anything of that sort? What happens?  
4

5 MR. CULHAM: Generally not. Generally on all  
6 the lower lakes the movement of coal is in what we  
7 call a self-unloading vessel. A brief description  
8 of that might be a vessel of varying sizes with a  
9 conveyor belt along the bottom, and with a large boom  
10 that goes out over the shore, discharges it in piles.  
11 On any location that runs up to 13 or 14 thousand  
12 tons a cargo or goes down to 3 thousand ton range.

13 THE CHAIRMAN: Is that the method employed  
14 on some of the docks in Toronto?

15 MR. CULHAM: Yes. I think without exception.  
16 The basic exception to the use of self-unloading  
17 is in Georgian Bay and Lake Superior and the reason  
18 for that primarily is that the self-unloading or  
19 bulk vessels have a regular movement carrying stone,  
20 iron ore, grain and there may be other things. Those  
21 are really the basic things that they carry from the  
22 Lakehead down into either on the south shore of  
23 Lake Erie or into some other part, into Lake Ontario  
24 and further down to Prescott with grain and into the  
25 grain elevators at the southern end of Georgian  
26 Bay.

27 Now the movement of grain by Lake Superior down  
28 into Georgian Bay isn't really affected, but when  
29 your ship is moving cargo down as far as or further  
30







1 than Lake Ontario, they can make a very economical  
2 movement back to Lake Superior and Georgian Bay in  
3 any northbound movement when they would be going  
4 north, and hence the self-unloader faces the  
5 necessity of more or less the reverse of that trend;  
6 would have to take all his freight northbound and  
7 come back light, and it is just not economical.

8 THE CHAIRMAN: And a self-unloading cargo  
9 ship is efficient and economical?

10 MR. CULHAM: We think almost to the maximum.

11 THE CHAIRMAN: And this dispenses with the  
12 necessity of having large scale facilities at each  
13 dock?

14 MR. CULHAM: It has certainly reduced  
15 capital expenditure in order to get into the dock  
16 business because really all that is necessary now  
17 to operate a dock is some method of picking coal up  
18 off the ground and loading it into whatever type  
19 of transport which is going onward, and perhaps a  
20 scale or some device to weigh the trucks on.

21 THE CHAIRMAN: Have you in the course of the  
22 past years handled Canadian coal to any extent?

23 MR. CULHAM: I am sure that there are members  
24 of our organization who have handled Canadian coal,  
25 yes sir.

26 THE CHAIRMAN: From the east or west?

27 MR. CULHAM: I would think both.

28 THE CHAIRMAN: Have you any idea?

29 MR. CULHAM: I have no knowledge or recollection  
30





1 of coal moving by water from Western Canada but this  
2 of course comes down into Lake Erie and Ontario  
3 and the canal ports from Nova Scotia.

4 THE CHAIRMAN: Have you personally in your  
5 own company handled any?

6 MR. CULHAM: No sir. I am not aware of the  
7 selling arrangements with the main producer in  
8 Nova Scotia. I think it is fair to say that  
9 primarily they have their own selling organization  
10 and they have their own facilities more or less.

11 THE CHAIRMAN: I was speaking merely of the  
12 carriage of coal to any of these ports from the east.

13 MR. CULHAM: Yes. The company that employs  
14 me has never -----

15 THE CHAIRMAN: Handled it?

16 MR. CULHAM: Handled any Nova Scotia coal  
17 for Dominion coal Company or anyone else.

18 THE CHAIRMAN: Well would the increase from  
19 the East cause you any apprehension?

20 MR. CULHAM: As an individual, sir?

21 THE CHAIRMAN: Your organization.

22 MR. CULHAM: I think that is of considerable  
23 more interest to and has more effect on one member  
24 of our company than on another. If I might take our  
25 member in Sault Ste. Marie, I seriously doubt whether  
26 Nova Scotia coal has even the slightest interest to  
27 him. Now those companies that operate in the east,  
28 I think you can understand that if you had a customer  
29  
30







1 you have had him for many years, and satisfied them  
2 well and find that there is an additional subvention  
3 or special subvention given to another purchaser  
4 to solve a temporary problem of his which makes it  
5 then more economical - in other words, you arrive  
6 at a position where you cannot be competitive in  
7 that plant - I think it would be of some concern  
8 but probably not unless and until that happens.

9 THE CHAIRMAN: What do you mean by a  
10 temporary situation?

11 MR. CULHAM: I believe the subvention that  
12 have gone in in the last couple of years have been  
13 referred to as temporary assistance. I think  
14 it has been - I think I am correct that the Nova  
15 Scotia producers have asked for temporary assistance,  
16 and I believe the Government has so stated, that the  
17 assistance is of a temporary nature but please  
18 understand sir, that the members of our Association  
19 do not hold any brief for coal produced in any one  
20 country or by any one company.

21 I think if you look at it in that light, you  
22 come back to ordinary business procedures.

23 THE CHAIRMAN: So that your facilities there  
24 are open for any coal from any place?

25 MR. CULHAM: Well I believe that without  
26 exception that our commercial dock operators are in  
27 business to perform a service which will render them  
28 a profit, but I don't know of any member, I don't  
29 know of any commercial dock operator who has any other  
30





1        basic incentive.

2                Now perhaps that answers the question that  
3 might be in your mind. The great fear that we have,  
4 Mr. Commissioner, the predominant fear we have  
5 is that natural gas which has surged into this  
6 market in such tremendous quantities, almost over night,  
7 like the turning on of an immense tap obviously  
8 implies a tremendous marketing problem on the gas  
9 people. That is the distributors and producers of  
10 natural gas.

11                Now, there has been some publicity recently  
12 before the Energy Commission on the low price at  
13 which the gas is sold at the wellhead, and I think  
14 some people have suggested that perhaps if one were  
15 to go and discover a well and drill it and that sort  
16 of thing today, it would be uneconomical to sell  
17 it at the price that is now being paid. Then  
18 the gas line comes down into Ontario, has no  
19 markets, or only that very small market that is there  
20 by manufactured gas and imported gas, which I don't  
21 think is probably more than 20% of the gas that is  
22 here now, and obviously they have to do something.  
23 I think one only has to get a five cent newspaper to  
24 get some conception of the trouble they had. We  
25 fear, in solving this problem, in looking for a  
26 solution, that they might go into, shall I say,  
27 steam markets and more or less take whatever they can  
28 get for a temporary period. To move this large  
29 quantity of gas, which I believe they must pay for  
30







1 whether or not they take it - if they would come  
2 in temporarily and say: "Let's put the gas in here.  
3 It may not be very remunerative and we have to pay  
4 these fellows at the end of the line ---"

5 THE CHAIRMAN: All of this was presented, I  
6 suppose, at the Energy Commission.

7 MR. CULHAM: Yes. I thought I was more  
8 or less acceding to your request to outline, and  
9 I think that is what we told the Energy Commission.  
10 Frankly, there was some suggestions at that time  
11 that we were sort of skirting on the fringe of the  
12 terms of reference. I hope not, but we may be  
13 accused along somewhat similar lines here.

14 THE CHAIRMAN: I suppose you assume that  
15 this gas pressure is going to continue for some time?

16 MR. CULHAM: If the gas company or a gas  
17 distributor would say now: "Here is a market which  
18 is remunerative for me and will remain remunerative,  
19 here is someone I can sell gas to on the basis we  
20 can run our pipeline, we can sell it here and not  
21 prejudice the small producer". -- it is not a  
22 temporary solution but it is a permanent solution.  
23 There has been a considerable amount of gas sold on  
24 that basis, on a basis that I don't think anyone  
25 can question, and is remunerative to them, but when  
26 they veer from that they are making rates that are  
27 prejudicial to the rights of the small users, and  
28 then we say that this is taking a market away from the  
29 normal channel. It is a thing which may well  
30







1 put the docks out of business, and every bit of  
2 information that has been going to the Government's  
3 hands in 20 years has pointed out that coal is going  
4 to remain an important source of energy.

5 THE CHAIRMAN: On what basis do you put that,  
6 that coal will remain basic, underlying source of  
7 energy?

8 MR. CULHAM: On the basis that the reserves  
9 of coal, which are in the hundreds of years, are  
10 so far beyond the reserves, the measurable or known  
11 reserves of natural gas that it leads some people  
12 to the view that such a fuel as natural gas, with  
13 its special characteristics, the special characteristics  
14 which endear it to the home owner so that he will  
15 pay more for it than coal - that perhaps this can be  
16 looked upon as a rare natural resource. The basis  
17 of my statement is that the reserves of coal are  
18 far greater than the reserves of natural gas or oil.

19 MR. CHAIRMAN: Suppose the inroads of gas  
20 consumption, say industrially, in this Province were  
21 sufficient at first to reduce, if not eliminate, for  
22 the time being your dealings in coal, what would  
23 you say about the effect of it upon prices of gas?  
24 Would they tend to go up or ---

25 MR. CULHAM: Prices for gas are subject to  
26 control in the Province of Ontario by the Fuel Board,  
27 the Ontario Fuel Board.

28 THE CHAIRMAN: By the Fuel Board of the  
29 Province.  
30





1 MR. CULHAM: Yes, the Province of Ontario.  
2 Now, there has been some more recent changes about  
3 which you have heard and will hear more by the  
4 establishment of a Department of Energy.

5 THE CHAIRMAN: Does that control apply to  
6 industrial use?

7 MR. CULHAM: Yes.

8 THE CHAIRMAN: Have they fixed a basis for  
9 rates?

10 MR. CULHAM: Yes.

11 THE CHAIRMAN: Those are already in effect?

12 MR. CULHAM: Yes.

13 THE CHAIRMAN: Upon what ground are you  
14 complaining about the dumping of gas?

15 MR. CULHAM: If we are complaining other  
16 than expressing fears - we are not coming here with  
17 any story that has not been given to the Ontario  
18 Fuel Board.

19 THE CHAIRMAN: Notwithstanding the rates  
20 are permitted by the Fuel Board?

21 MR. CULHAM: That is correct, sir. The trend  
22 for lowered prices for large volume users of gas  
23 is down. Until this time I think most of the gas  
24 that has been sold in larger quantities to other  
25 than distributors, not Trans-Canada Pipe-line, has  
26 been to people who were making gas from coal and  
27 using gas on a twelve-month basis for other than steam-  
28 making purposes. So I am afraid it is only now  
29 we are facing the extremely serious competition that  
30







1 we will get from natural gas.

2 THE CHAIRMAN: Was that question put before  
3 the Fuel Board? Has it yet?

4 MR. CULHAM: Yes, sir.

5 THE CHAIRMAN: So it has been considered --

6 MR. CULHAM: And has been expressed as a fear,  
7 almost, that a proper consideration may not be given  
8 to the remunerativeness of gas rates.

9 THE CHAIRMAN: I was going to ask you.  
10 Has the Board placed any minimum price?

11 MR. CULHAM: Yes, there is a minimum price  
12 in the last information that was available to us.

13 THE CHAIRMAN: Then that must have some  
14 basis of policy behind it, and is it that minimum  
15 that you are apprehensive of?

16 MR. CULHAM: Not basically, sir. We are  
17 apprehensive of that minimum being reduced from  
18 information that is coming to us from people who  
19 are now negotiating with gas companies at rates lower  
20 than minimum rates approved by the Ontario Fuel  
21 Board.

22 THE CHAIRMAN: That must be approved by the  
23 Board ultimately?

24 MR. CULHAM: I would think so. I am not  
25 really posted to the minute on the new Act. I believe,  
26 though, that it does carry with it that authority to  
27 investigate the matters that I am referring to.

28 THE CHAIRMAN: That particular problem has not  
29  
30





1        been thoroughly explored by the Gas Board of Ontario.

2                MR. CULHAM:        I wouldn't want to say that it  
3        hasn't been fully explored.

4                THE CHAIRMAN:        I don't understand what you  
5        mean.    For my own information I would like to know  
6        whether what you say about the dumping of gas at  
7        sub-normal prices has been placed before the Board  
8        and a ruling made on it.

9                MR. CULHAM:        I wouldn't really say that  
10       there has been a ruling made on it.    It is more or  
11       less private conversations that we have had with the  
12       Ontario Fuel Board, and in each case they say they  
13       are very cognisant of it, the importance of coal on  
14       the economy.    The Brief submitted this morning  
15       indicate better than I can the future need for coal.  
16       The Ontario Fuel Board has said to us that they  
17       certainly recognize that the coal docks are going  
18       to be needed.    There may be a temporary period where  
19       we are going to get competition, but they see in  
20       the end where our services are going to be necessary.  
21       It is merely apprehension; the presentation of our  
22       submission to the Energy Commission was simply from  
23       the standpoint that if we did not appear someone  
24       might, hearing perhaps only one side of the story,  
25       think that as long as the gas people can sort of  
26       improve their overall position and as long as we can  
27       put gas in this plant at a saving to the operator  
28       of the plant, that is perhaps good for Canada,  
29       without realizing the effect it has on another method  
30





1 of distribution.

2 THE CHAIRMAN: That submission was made to  
3 the Energy Board.

4 MR. CULHAM: To the Royal Commission on Energy,  
5 sir.

6 THE CHAIRMAN: Then in addition to that you  
7 have had the matter before the Energy Board of  
8 Ontario?

9 MR. CULHAM: No, sir.

10 THE CHAIRMAN: Is there such a Board?

11 MR. CULHAM: There is a Board - I am sorry,  
12 I am not exactly sure of the status. I believe the  
13 Board has been formed. I believe the regulations  
14 and laws under which they are going to operate are  
15 in the stage of second or third reading. I do not  
16 believe they have become law.

17 THE CHAIRMAN: When you say you have  
18 discussed it informally with members of the Board,  
19 what members?

20 MR. CULHAM: With the members of the Ontario  
21 Fuel Board.

22 THE CHAIRMAN: That would be distinguished  
23 from the Energy Board?

24 MR. CULHAM: That is correct. I believe that  
25 if we were to anticipate a little bit, there won't  
26 be an Ontario Fuel Board.

27 MR. CLARKSON: If I may say, sir, the  
28 Ontario Fuel Board is still the law of the Province;  
29 that is the official body governing fuel, natural  
30







1 gas particularly. At the moment there are two  
2 new Energy Bills before the Ontario Legislature,  
3 and, as a matter of fact, they are due for second  
4 reading this afternoon, and that is why the Minister  
5 didn't present the brief this morning.

6 THE CHAIRMAN: And do those bills contemplate  
7 the control of prices at which gas will be sold?

8 MR. CLARKSON: One of the important factors  
9 which has been of some concern to the Province has  
10 been the control of gas rates.

11 THE CHAIRMAN: Would that include minimum  
12 as well as maximum?

13 MR. CLARKSON: That would include minimum  
14 rates insofar as the company's overall rate of  
15 return, and so forth, would be partly affected by  
16 all the prices, and so that matter would be of some  
17 interest and is of some interest to any fuel or  
18 energy Board which controls gas rates.

19 If I may add one further point on this  
20 subject, I have on my desk at the moment a letter  
21 from <sup>a</sup>prominent gas company complaining that they  
22 can't meet prices quoted by the oil companies.

23 THE CHAIRMAN: How do you find the oil in  
24 its competitive pressure, Mr. Culham?

25 MR. CULHAM: Competition, sir, is a thing  
26 that a coal man cannot do well without. We can't  
27 exist; the coal industry has been an industry of  
28 extreme competition throughout its entire history,  
29 with 600 or 700 individual producers in all the  
30





1 wide areas.

2 THE CHAIRMAN: That is coal competing  
3 with itself, from different sources, say.

4 MR. CULHAM: I believe that the fact that  
5 there are many coal mines and as many different coal  
6 distributors, as many different methods of moving  
7 coal, rail, water and truck, and that sort of thing,  
8 has brought it more or less by evolution to the  
9 point that we don't mind competition.

10 Now, oil has been ~~a~~ competitive factor to us.  
11 Some of the same elements as I believe apply to  
12 natural gas have and perhaps do to a degree apply to  
13 oil today. That is where the heavy ends of oil,  
14 the end product must be sold, the residual oil must  
15 be sold. That is as true of Africa as it is of  
16 Australia. It doesn't matter - a waste product,  
17 so to speak, a residual, end - it doesn't matter  
18 whether you are selling corn flakes or coal, because  
19 we are faced with the same end, a product where there  
20 is nothing left.

21 THE CHAIRMAN: How do you find the position  
22 of oil in the competition for industrial thermal  
23 power? Is it as strong against coal as gas or is  
24 it effective against gas when they come in direct  
25 competition?

26 MR. CULHAM: Mr. Commissioner, there has been  
27 a very limited amount of conversion from industrial  
28 steam practice, conversions of coal to oil in  
29 industrial steam-making practice. It has been really  
30







1 quite negligent in Ontario. There has been a  
2 tremendous amount with the apartment building, office  
3 building.

4 THE CHAIRMAN: And homes.

5 MR. CULHAM: Yes, and homes. Ontario has seen  
6 a period when all of the private dwellings have been  
7 built in the past five years. I doubt whether in the  
8 Southern Ontario area - I am quite sure less than  
9 5% were equipped to burn coal. That was so up to  
10 perhaps a year or so ago; primarily oil burners  
11 were put in homes, and large real estate developments  
12 are going on now with gas as fuel.

13 THE CHAIRMAN: I gather, as against oil, the  
14 coal industry has been made to maintain its position  
15 in large consumption.

16 MR. CULHAM: I think that is correct. I think  
17 I could sum it up in this way. We have a slogan  
18 in an engineering arm of our association which is  
19 known as the Bituminous Coal Institute of Canada.  
20 That slogan is: Where costs count, coal is cheaper.  
21 I believe the great bulk of the people who use larger  
22 quantities of coal, industries which use it on the  
23 basis of steam, will find that coal is the cheaper  
24 fuel.

25  
26 Now, the notable exception is Northern Ontario,  
27 with the large paper mills up there, because they  
28 are much closer to Western Canada, combined with the  
29 fact that the paper mills are located at large  
30 distances inland involving high freight rates, and





1 they are much closer to the source of natural gas  
2 and they have found, by and large, that natural gas  
3 is the cheaper fuel and they have switched over.

4 With contracts, with savings of such a size  
5 that it will enable them to get the capital  
6 investment in the turn-over, I think they did that  
7 with the feeling that they are going to have an  
8 adequate supply of gas on a twelve-month basis,  
9 although the Ontario Fuel Board Act states that  
10 anyone processing gas on an interruptible basis  
11 must have an alternative method of supply for steam  
12 requirements. They must have an alternative source  
13 of supply of fuel.

14 THE CHAIRMAN: That is compulsory.

15 MR. CULHAM: Yes. That is to make an  
16 interruptible gas contract.

17 THE CHAIRMAN: Do they have large quantities  
18 on that basis?

19 MR. CULHAM: Perhaps I will be corrected,  
20 but I am quite sure that these large contracts made  
21 by the paper companies of Northern Ontario are  
22 interruptible contracts.

23 THE CHAIRMAN: Have you had in this Province  
24 any so-called dumping of electrical power?

25 MR. CULHAM: Within my memory, sir, but not  
26 for a long time.

27 THE CHAIRMAN: Not lately.

28 MR. CULHAM: No, not that I have heard of.  
29 There might have been a small quantity go into the  
30







1 electrical boilers in the past year.

2 THE CHAIRMAN: There has been such an  
3 occurrence in Quebec owing to the reduced requirements  
4 of electricity in certain industries.

5 MR. CULHAM: Yes. I am sure Ontario Hydro  
6 could say more definitely on that, but that has been  
7 a factor with us.

8 SUBMISSION ON BEHALF OF CANADIAN COMMERCIAL  
9 COAL DOCK OPERATORS ASSOCIATION

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10 ---EXHIBIT 11)

11 1. INTRODUCTION

12 This submission is made on behalf of the Can-  
13 adian Commercial Coal Dock Operators' Association.  
14 Our members, as suppliers of the main form of industrial  
15 fuel used in Central Canada, welcome the opportunity  
16 of being represented before your Royal Commission and  
17 beg to offer this submission under clauses (b), (c)  
18 and (e) of your terms of reference.

19 All of the Association's member firms are  
20 engaged in operating docks for the storage and  
21 distribution of water-borne bituminous coal, their  
22 field of operation being the Great Lakes and connecting  
23 waters from Fort William to Montreal.

24 We do not wish to burden the record with well-  
25 known facts about the enormous reserves of coal south  
26 of the Great Lakes, their quality and variety, or  
27 their comparative nearness to Central Canada's market,  
28 fundamental though these are to the economics of our  
29 fuel supply. Nor does it seem necessary to elaborate  
30 on the arrangements for transport, storage and dis-







1  
2 tribution of coal except as they bear on the present pro-  
3 blem. Data on all these matters were presented in  
4 a number of submissions before the Royal Commission on  
5 Coal in 1945 and were supplemented by inquiries under-  
6 taken by that Commission's research staff, the whole  
7 being digested in the Commission's Report. For your  
8 convenience, however, we attach an appendix giving a  
9 list of the earlier submissions in Part A and re-  
10 producing some of the descriptive passages in full  
11 in Part B. We also append a list of our present  
12 membership in Part C.

13 To avoid misunderstanding we wish to say at  
14 the outset that we specialize almost entirely in  
15 bituminous coal and are therefore concerned primarily  
16 with fuel destined for boiler use, for metallurgy  
17 and other industrial purposes.

18 In this submission we deal mainly with the  
19 consequences of selling natural gas, at rates below  
20 average cost, for use under steam boilers. We are  
21 especially concerned with sales of gas on an inter-  
22 ruptible basis, and with firm gas offered to industry  
23 on a seasonal basis during the six or eight warmer  
24 months of the year. These two kinds of service have  
25 been referred to in a recent article by Mr. Charles  
26 Coates, the President of Trans-Canada Pipe Lines  
27 Ltd., as "off-season dump gas" (Financial Times,  
28 London, 24 February, 1958, Supplement on Canada,  
29 p.41). We believe that these types of service, if  
30 offered on the scale anticipated, will have adverse con-





sequences for many large users of bituminous coal.

2. TOTAL CONSUMPTION OF FUEL ENERGY AND  
THE PROMOTED DIVERSION TO GAS

The recent industrial consumption of fuel energy in Ontario and Quebec, as provided from coal and oil is shown in Table 1. Part I of the table shows that in 1954 the total industrial energy consumption by way of coal and oil in Ontario and Quebec (expressed in units of MM B.t.u.) was some 395,000 units. Of this total almost 300,000 units or 75.8% were provided by coal and some 95,000 units, or 24.2%, by oil. This was the consumption in the somewhat depressed year of 1954. Two years later, in 1956, the corresponding industrial consumption of fuel energy had risen by one-fourth, to 498,000 units. Of this larger total some 364,500 units were provided by coal, or 73.2% and 133,500 units or 26.8% by oil.

The lower part of the table, marked Part II, gives the experience of Ontario and Quebec separately, showing the preponderance of coal in Ontario and of oil in Quebec. The corresponding quantities in the customary units of net tons and barrels are also shown.

In Part III of Table 1 will be found, for comparison, Trans-Canada's forecast of the distributors' natural gas sales to industrial consumers only taken from its Exhibit 6. The table shows a forecast of 135,746 units (MM B.t.u.) of gas to be sold







1 to industry in 1962-63. This represents a very  
2 large amount of energy, no less than 27 per cent of  
3 the 498,000 units (approximately) derived by industry  
4 from both coal and oil for 1956. When compared with  
5 coal alone, these 136,746 units amount to  $37\frac{1}{2}$  per  
6 cent of the energy derived by industry from bitum-  
7 inous coal in 1956. They are the equivalent of some  
8 5,065,000 tons of coal.

9 We recognize the imperfections of a comparison  
10 between the actual total for 1956 and a forecast  
11 for 1962-63. A more logical method, though more  
12 difficult and conjectural, would compare the fore-  
13 casts of industrial gas sales in the 1960's with  
14 corresponding forecasts for coal and oil, on the  
15 assumption that no western gas was being used. Such  
16 a comparison would recognize that, as total energy  
17 consumption probably will have grown by 1963, the  
18 proportionate displacement of coal and oil owing to  
19 substitution of 137,000 units of gas would amount to a  
20 corresponding smaller proportion of the total at  
21 that time (i.e. less than  $37\frac{1}{2}$  per cent).

22  
23 III. CONSUMPTION FROM SUMMER GAS WILL LEAD  
24 TO HIGHER COAL PRICES AND INDIRECTLY  
25 TO HIGHER GAS PRICES

26 For reasons now to be given, we anticipate  
27 that sales of "off-season dump gas" on the intended  
28 scale will inevitably raise the price of coal, and  
29 will indirectly lead before long to higher prices of  
30 natural gas. These unfavourable results will be  
felt particularly in the smaller centres and in the





1 adjacent areas now served by truck. Of forty-seven  
2 ports having one or more coal docks between Cornwall  
3 and Fort William, thirty are the site mainly of  
4 small or moderate-sized operations. Sixteen ports  
5 accounted for an approximate turnover of less than  
6 50,000 tons in 1957, six ports for 50,000 up to  
7 100,000 tons and eight for 100,000 to 200,000 tons  
8 (G.P. Cooper and W.J. Moroz, Jr., Canadian Mining  
9 and Metallurgical Bulletin, January 1958, pp. 25-31).

10 The anticipated loss of tonnage to gas is  
11 likely to result in the disappearance of a number of  
12 the coal docks in these smaller places, leaving  
13 them and the adjacent area without a single operating  
14 coal dock to assure a continuing winter supply  
15 of low-cost coal.

16 If water-borne shipments are not available,  
17 coal can of course be brought into an area by land.  
18 This ordinarily involves a substantial increase in  
19 freight costs, however, and gives rise to storage  
20 problems or the danger of interrupted supplies or  
21 both together. One way or another the supply of  
22 coal will of necessity become dearer in most places,  
23 and less certain everywhere, if the docks disappear.

24 The disappearance of the docks would follow  
25 naturally from the economics of the coal dock  
26 business. Most of the costs of operation are fixed  
27 or constant rather than variable, as the Royal  
28 Commission on Coal described in 1946 on page 364  
29 of its Report:  
30







"The principal operating costs of a dock are rent, taxes, labour, insurance, depreciation on equipment, maintenance and repair and such miscellaneous expenses as power, light, tools, etcetera, and there are of course general supervision and maintenance expenses. The majority of these expenses are fixed and bear little relation to the tonnage handled. If a dock can operate for an expense of say 60 cents per ton on 130,000 tons, it is probable that this would be closer to \$1.00 per ton if the tonnage should drop to 80,000 or 90,000 tons."

In the case of the smaller coal docks, which are those in question, the minimum economic shipment of water-borne coal in self-unloading vessels is also a factor. For ports on the open lake the minimum shipment is 2,500 tons and there is a further economy in using vessels of larger capacity, fully laden, where harbour conditions permit. It is true that for a number of places located at some distance from deep water (such as Chatham and Napanee) the advantage of placing the coal some miles inland justifies the use of smaller shipments than would otherwise be economical, but even in these places the minimum lot is about 1,000 tons.

If the annual tonnage stored and moved over a dock falls to the point where it cannot support the dock's level of constant costs, the dock must either raise its charges, curtail the whole scale of the enterprise to reduce the constant costs (if that is possible), or go out of business. There are limits, moreover, to how far the contraction in scale of operations can go. There is a substantial minimum of personnel and facilities for even the







smallest coal dock enterprise. Also there must be enough tonnage to justify consigning a self - unloading vessel with the minimum cargo, as just mentioned. In other words, both the dock establishments and the incoming vessels must be of substantial size and must operate at a rather high load factor, in order to be economical. All branches of energy supply are large scale operations and a fall in the load factor, in the coal dock business as in natural gas and electric power, can convert a sound enterprise into a failure.

To illustrate the effect of the constant costs inherent in a coal dock operation, an analysis has been prepared for three separate coal docks under a single management, showing the levels of cost for handling various tonnages, apart from head office and selling expenses. Details of the analyses are presented in the Appendix, Part D. The final results, expressed in costs per ton for dock handling only, are as follows:

Average cost per ton handled

Annual Tonnage	Dock <u>A</u> \$	Dock <u>B</u> \$	Dock <u>C</u> \$
20,000			.93
40,000		.86	.67
60,000		.67	.56
80,000		.53	
105,000	1.65		
140,000	1.32		
170,000	1.10		





<u>Annual Tonnage</u>	<u>Dock A</u>	<u>Dock B</u>	<u>Dock C</u>
210,000	.93		

From this it will be seen that a reduction to an annual load factor of about 50 per cent, as a result of business lost to off-season dumped gas, would lead to an increase of from 50 to 75 per cent in the per ton cost of handling coal over the docks.

Our estimate of the outlook in smaller places, then, is that we do not anticipate that many of the docks can continue to operate on the basis of their present handling charges if their tonnage is seriously reduced. Their constant costs are already very close to the minimum and they will be compelled either to raise their charges per ton or go out of business. We believe that either of these outcomes, dearer coal or no coal, would be against the interests of consumers generally.

The effect on fuel costs in such areas will not be confined to higher costs for coal, for the suppliers of interruptible gas can soon secure higher gas rates if the price of coal or oil rises. In some cases we are informed that the contracts for gas even provide for an automatic increase in rates if other fuels rise in price. It follows that if the natural gas distributors succeed in driving either coal or oil to a less economic basis, gas can reap the double advantage of larger sales and higher prices. It can do so, moreover, although still re-







1 maining as the supplier of only a part-time service  
2 to industry.

3 We now turn to the results in the larger  
4 centres. Since there are several commercial coal  
5 docks in almost every large port, a marked  
6 reduction in annual tonnage is likely to lead to  
7 a reduction in the number and size of the remaining  
8 docks but not to their complete disappearance.

9 At first sight such an adjustment might  
10 seem of no consequence to consumers, provided the  
11 surviving docks were of average capacity and  
12 efficiency. Further consideration will show, however,  
13 that even in the larger centres the dock-handling costs  
14 cannot be kept down at the present levels if most  
15 of the summer tonnage is lost and if, at the  
16 same time, enough facilities are maintained for  
17 handling the heavy winter requirements. In the  
18 winter months, it will be recalled, not much gas  
19 is to be available for industry since in those months  
20 it will be sold to residential consumers at about  
21 three times the industrial price.

22 The following example, which is necessarily  
23 expressed in conjectural figures, will serve as an  
24 illustration. If the industrial consumption  
25 of coal in the warmest six months of the year were  
26 reduced by 60 per cent, and if in the coldest months  
27 of the year it were reduced by 20 per cent, the  
28 combined decline over a year would amount to a  
29 little under 40 per cent. In response to this decline  
30



1 we would expect a contraction in dock facilities  
2 of from 35 to 45 per cent, or say 40 per cent.  
3 Such a contraction would not leave enough storage  
4 space to satisfy winter needs for coal which, in  
5 view of the seasonal character of the gas supply,  
6 is assumed to have fallen no more than 20 per cent.  
7 More specifically, a contraction in dock storage  
8 of 40 per cent accompanied by a contraction of  
9 only 20 per cent in winter consumption implies the  
10 bringing of one-fourth of the winter coal require-  
11 ment by rail, while a contraction in dock storage  
12 of 45 per cent implies bringing almost one-third  
13 by rail. It may be added that full use of dock  
14 storage capacity has been assumed in each situation  
15 mentioned.

16 At a first reading the foregoing analysis  
17 might seem too conjectural to carry great weight.  
18 It may be restated in broad terms as follows:  
19 if sales of "off-season dump gas" are to cut the coal  
20 market down to less than one-half during six months  
21 of the year, as Trans-Canada's forecast implies,  
22 the coal dock operators could not possibly afford  
23 to occupy the same area of land they do today  
24 unless this were made possible by higher dock  
25 charges (which under prevailing competition with other  
26 fuel it might not be prudent to impose) or by a  
27 public subsidy. And if they cannot afford to occupy  
28 the land, they cannot store the coal for winter use.

29 At this point we should add that some of  
30 our industrial customers place as much stress upon







1 the certainty and all-round economy of stockpiles  
2 on the coal docks, as upon the prices of the coal  
3 supplied. Our service is certain because of our  
4 large stockpiles, which at the close of navigation  
5 amount to about half-a-year's consumption. Also our  
6 service is economical because it saves the cost of  
7 providing space for storage, as well as the  
8 other costs of maintaining and handling a private  
9 stock of fuel.

10 Unfavourable results for the consumer might  
11 also be expected in the delivery end of the business.  
12 If the specialized motor trucks required for  
13 efficient delivery of industrial coal were to be idle  
14 for a considerable part of the year, they would  
15 require, when in action, a higher charge per ton  
16 of coal moved. There would also be labour problems  
17 associated with the less regular employment offered  
18 and it would undoubtedly be necessary to resort to  
19 less capacious and hence less efficient all-purpose  
20 trucks that could be diverted to the building trades  
21 in the warmer months. In this way the unfavourable  
22 impact of a lower load factor in coal delivery  
23 could be reduced, but it is certain that it could  
24 not be overcome.

25 All in all then, we anticipate that in the  
26 larger centres as in the small the added competition  
27 offered by interruptible and seasonal gas will  
28 have the paradoxical result of raising the prices  
29 of bituminous coal and ultimately of gas itself.  
30







1 IV EVENTUALLY THE DUMPING OF GAS SHOULD  
2 DIMINISH BUT IN THE MEANTIME MANY COAL  
3 DOCKS WILL HAVE BEEN IRREVOCABLY TURNED  
4 TO OTHER USES.

---

5 If coal docks are driven out of business and if,  
6 as American experience suggests, the supply of  
7 interruptible gas rises in price after several years,  
8 coal will once more be required on a year-round  
9 basis by those who have been using boiler gas  
10 seasonally. It might be thought that resumption  
11 of year-round demand for boiler fuel would auto-  
12 matically lead to a restoration of dock-side coal  
13 handling on the same basis as today. Eventually  
14 this would probably happen, but in the meantime  
15 the dock structures may have disintegrated or the  
16 storage space may have been built upon. These  
17 conditions would greatly increase the cost of  
18 starting a new enterprise and delay or prevent the  
19 reappearance of low-cost coal supplies, the  
20 moroso as there are few waterfront properties with  
21 suitable deep-water dockage alongside. Our view  
22 is that if coal docks disappear in small ports,  
23 some of the docks may never be re-established,  
24 thereby putting such ports at a competitive dis-  
25 advantage, for all time, as a location for industry.

26 The cessation of coal dock service would  
27 work a hardship on large users of coal who have  
28 designed their plant on the assumption that econ-  
29 omical stockpiles will be maintained in the nearest  
30 harbour. These consumers, though they sometimes  
have a railway siding, are not always able to





1 accommodate on their own premises the rather large  
2 private stockpiles advisable for those who depend  
3 on rail shipment of bulk orders.

4 More serious results would be felt by indust-  
5 rial plants established at some distance from  
6 railway tracks. Such firms have hitherto been assured  
7 of continuous and economical bulk shipments from a  
8 nearby coal dock, and this is one of the factors  
9 which has enabled them to dispense with a location  
10 on the railway. If coal docks cease to operate, it  
11 goes without saying that the gap between the railway  
12 and such plants can be bridged, and that storage  
13 places can be found, but the new arrangements will  
14 as a rule involve a considerable increase in costs  
15 per ton for freight, for storage, and in all probab-  
16 ility for handling.

17 The future of the large railway coal docks,  
18 which have played an important role in Ontario's  
19 largest export industries, deserves mention at  
20 this point. The recent closing of the big C.P.R.  
21 undertaking at Britt on Georgian Bay is of course  
22 justified by the reduced railway coal consumption,  
23 but the consequences for industry and for future  
24 industrial development merit attention.

25 Coal has the advantage of being a source  
26 of energy which can be held in reserve, since it  
27 can be stored in large quantities both cheaply and  
28 safely. Carrying these reserves is one of our main  
29 functions. A community which relies mainly on  
30 energy sources which cannot be held in reserve,







1 as coal can, is highly vulnerable to interruption  
2 by accidents, natural disasters, strikes, sabotage  
3 and warfare. In the electrical industry, which  
4 is extremely vulnerable to interruption since storage  
5 is impossible, great sums have been spent to  
6 reduce interruptions from these causes by the  
7 building of elaborate inter-connections between  
8 generating stations. In the case of gas, some inter-  
9 connections of the same type are possible, but  
10 owing to the distance from the Canadian wells to  
11 eastern consuming centres it is plain that little  
12 or no protection can be achieved by this method.  
13 It would seem a matter of public policy to assure  
14 the storage of a large amount of natural gas in  
15 Ontario; if sufficient could be stored it would be  
16 possible to vary the amount in storage and thereby  
17 avoid wasting the gas for purposes of low priority.

19 V. EXCEPTIONAL CHARACTER OF THE COMPETITION  
20 FROM DUMPED GAS

21 We do not come here to complain of ordinary  
22 competition, nor of the intensified competition  
23 ordinarily experienced from new products or processes.  
24 We experience these pressures in the ordinary course  
25 of business, and in dealing with them all that  
26 we ask of government is the freedom to meet them  
27 on even terms, especially in regard to taxation  
28 and subsidization.

29 Today, However, we face a competitive sit-  
30 uation that is altogether exceptional. It is ex-  
ceptional in the extent of the price reduction



1 involved, in the irregularity of the supply of the  
2 competing product, and in the likelihood that  
3 recurring outbursts of supply of the cheapest gas  
4 will eventually diminish as more profitable  
5 outlets are found.

6 Underlying this situation is the fact that a  
7 new industry, which has deliberately overbuilt  
8 its plant in the interest of future economies, is  
9 making an effort to transfer its seasonal over-  
10 capacity to us. It is trying to do so, moreover,  
11 without bearing the responsibilities and risks  
12 which we assume in handling the annual peak load  
13 in fuel consumption.

14 We now wish to discuss the matter of dumped  
15 gas rather fully, but before doing so we should make  
16 it clear that we recognize the existence in other  
17 lines of business of various forms of price reductions,  
18 such as seasonal discounts, quantity discounts and  
19 occasional mark-downs. In our own business we  
20 normally buy coal at reduced prices in the warm  
21 months, a method which incidentally enables the  
22 mines to offer steadier employment and operate  
23 more economically. Again, we ship coal to the  
24 upper lakes as return cargo in vessels which would  
25 otherwise travel empty, thereby securing lower  
26 freight rates to Port William, the Sault and Georgian  
27 Bay points than to Toronto and Hamilton.

28 The closest analogy to off-season gas has  
29 been the sale of off-peak or secondary hydro-  
30







1 electric power, mainly for raising steam in the electric  
2 boilers of pulp and paper companies. This has  
3 taken place chiefly in the Province of Quebec,  
4 where it was considerable especially in the  
5 1930's and immediately after the war.

6 Coming now to the extremely low rates for  
7 interruptible gas, it might be thought that they  
8 were merely another example of the same form  
9 of competition. We hold, however, that dumped  
10 gas is offered under circumstances substantially  
11 different from the examples just mentioned.

12 It cannot be argued, we hold, that the  
13 seasonal sale of industrial gas in warm months  
14 is closely analogous to the mines' summer discount  
15 on coal. Coal is sold in the summer at only a  
16 slight discount, and we buy it not to use in  
17 a wasteful manner but to store against the time  
18 when it will have a higher value. In so doing  
19 we use the labour of men whose time might other-  
20 wise have run to waste in summer unemployment;  
21 nothing is dissipated, and a great deal is conserved.

22 As to the freight charges on coal shipped  
23 as a return cargo to the Upper Lakes, this is a  
24 permanent procedure around which the shipping  
25 companies have built their business. Nor have the  
26 railway's expectations and profits been disturbed  
27 in any way by the practice; on the contrary, the  
28 railways have probably been the largest beneficiary  
29 of it until recently, as shown by the large  
30







1 volume of coal business over their own docks  
2 and the subsequent coal movement by rail.

3 The third example, namely the sale of  
4 secondary hydro electric power for use in electric  
5 boilers, is the closest analogy to dumped gas.  
6 If the resemblance is examined carefully, however,  
7 two important differences will be found: first,  
8 that in the case of hydro power there is no consumption  
9 of any irreplaceable resource; second, that all of  
10 the resource in question (the flow of water)  
11 would necessarily continue flowing in most cases  
12 whether the power were generated or not.

13 In each of the three cases mentioned, we  
14 therefore hold that there is a substantial difference  
15 between normal commercial practice and the extreme  
16 price reduction now offered on a qualified basis  
17 in the case of industrial gas.

18  
19 VI. UNUSED CAPACITY AND HARMFUL COMPETITION:  
20 THE EXPERIENCE OF UNITED STATES RAILROADS

21 In many respects the interruptible rates  
22 now quoted for natural gas recall the practices  
23 which developed among United States railroads in the  
24 1880's. Writing of events of that time, an American  
25 authority, Professor Martin G. Glaeser, of the  
26 University of Wisconsin, in a volume entitled  
27 Public Utilities in America Capitalism (New York,  
28 MacMillan, 1957), explains at page 66 that the  
29 Windom Committee of the United States Senate,  
30 appointed in 1874, complained of excessive railway





1 rates. On the other hand, he says that the  
2 Cullom Committee of 1886 "instead of complaining  
3 about high rates ... contended that the 'paramount  
4 evil' in the conduct of the transportation system,  
5 'unjust discriminations between persons, places,  
6 commodities, and particular descriptions of traffic'.  
7 Improvements in railway facilities, the growth  
8 of traffic, and particularly rate wars had in the time  
9 between the two reports changed entirely the incidence  
10 of the railway problem. Discrimination,  
11 as a new phase of the railroad problem, was the  
12 direct result of excessive railway competition...  
13 Place discriminations arose out of the fact that  
14 railroads regarded themselves adjuncts to the markets  
15 which they entered, and their rates were consequently  
16 adjusted to favor the market which particular  
17 railroads desired to build up. Higher rates were  
18 also in effect upon local traffic, not subject to  
19 competition, as compared with rates applying on  
20 traffic moving between junction points where com-  
21 petitive influences were felt. Another type of  
22 discrimination arose between large and small shippers  
23 because the large shipper was able to secure a  
24 rebate or other preferential treatment on account  
25 of the larger quantity of traffic which he could  
26 offer."

27  
28 The problem of excessive rate cutting among  
29 railroads was also examined, more than thirty  
30 years ago, by Professor Eliot Jones, Professor  
of Economics at Leland Stanford University, in







1 his work entitled Principles of Railroad Trans-  
2 portation (New York, MacMillan, 1924) and despite  
3 the length of his statement we take the liberty  
4 of quoting it rather fully. At Page 91, he writes:

5 "It is a generally accepted view that  
6 competition among railroads, unless restrained  
7 in some manner, tends to become ruinous, that is,  
8 fails to establish a normal level of rate sufficiently  
9 remunerative to attract the additional investments  
10 of capital that recurrently become necessary."

11 In describing the forces that lead to this sit-  
12 uation he continues at pages 92-93:

13 "The large investment in fixed plant  
14 (roadway, structures, terminals, etc.) gives rise  
15 to large fixed (or constant) expenses; that is,  
16 expenses that do not vary in proportion to changes  
17 in the volume of traffic. Since the expenses do  
18 not increase in the same ratio as the traffic, a  
19 railroad is naturally desirous of securing additional  
20 traffic in order to profit by the law of increasing  
21 returns. If it can secure additional traffic without  
22 making concessions in rates, so much the better; but  
23 the point to note is that the railroad can afford to  
24 take additional traffic at any rate which exceeds the  
25 extra cost incurred on account of the increased business.  
26 The reason that the rate on this additional traffic need  
27 not cover its proportionate share of the fixed expenses  
28 is that these expenses (being fixed) will continue whether  
29 or no the added traffic be taken. It suffices, therefore,  
30 if the rate is high enough to make some contribution,  
however slight.





1 to the fixed expenses.

2 "The added traffic thus secured may be  
3 new traffic or it may be traffic that had been  
4 moving over another railroad line. If the former,  
5 its carriage represents a net gain; if the latter,  
6 it represents a diversion of business not likely  
7 to be submitted to by the other road. For it is  
8 quite as true of the second road as of the first  
9 that its expenses are largely fixed (constant),  
10 and therefore it cannot tamely submit to such a loss  
11 of its business. If it meets the rate of its  
12 competitor, the particular item of traffic affected  
13 will fail to make its proportionate contribution  
14 to the fixed expenses, but it is better that  
15 the competitive traffic make some contribution  
16 to these expense than none. Accordingly, the second  
17 road will usually meet the rate or even cut it still  
18 further, thus leading in all probability to another  
19 cut by the original trespasser until finally  
20 the rate may fall so low that it barely covers  
21 the extra cost occasioned by the movement of the  
22 competitive traffic. Below this point it would not  
23 ordinarily be to the interest of either road to go.  
24 Yet at this point, it is generally conceded, the  
25 rate on all competitive traffic may remain for  
26 considerable periods of time. If, then, there are  
27 present the conditions favourable to such a  
28 struggle, that is, transportation facilities in  
29 excess of the traffic offered at rates remunerative  
30







1 to the railroad, and a large percentage of traffic  
2 that may move by two or more roads instead of being  
3 local to any one road, rates may for some periods  
4 of time be ruinous to both roads."

5 To an increasing extent, we are advised,  
6 theorists working in the field are swinging away  
7 from the view that out-of-pocket costs for extra  
8 business provide a sound basis for pricing. The  
9 tendency is now to define marginal or out-of-pocket  
10 costs rather broadly, so as not to omit the  
11 indirect cost which sooner or later become involved  
12 if there is a substantial amount of business at  
13 cut rates.

14 In consequence, true marginal costs prove  
15 to be closer to average costs than was formerly supposed.  
16 The question is examined by Professor R.K. Davidson,  
17 of Purdue University, in a more recent context  
18 which touches gas, in his Price Discrimination in  
19 Selling Gas and Electricity (Baltimore, Johns  
20 Hopkins Press, 1955). He writes, at page 195;

21 "It is a widely accepted belief that electric  
22 and gas utilities are prime examples of industries that  
23 operate in the place of decreasing longrun average  
24 costs ... This is probably no longer the situation,  
25 except for small, non-interconnected utilities.  
26 Under present conditions with widespread interconnections  
27 between utilities and the multiplicity of production  
28 units, it seems likely that there is little or no  
29 difference between long-run marginal and average  
30







1 costs for most electric utilities; operation within  
2 the phase of decreasing long-run average costs may  
3 still exist for some electric and gas utilities  
4 with respect to decreasing facilities, but the  
5 differences would appear to be small while some  
6 gas companies are probably operating in the phase  
7 of increasing average cost, with respect to  
8 distribution capacity."

9 General action to restrain rate cutting has  
10 developed slowly. We are informed that in the  
11 United States, because it had always been assumed  
12 that carriers were entitled to a reasonable return,  
13 the Courts and Congress did not find it necessary  
14 to spell out the need for a fair return and a  
15 reasonable general level of rates, until the re-  
16 gulation of individual rates had gone on  
17 for many years.

18 Similarly we are informed that in Canada  
19 individual rates were changed and regional rates  
20 altered several years before there were general  
21 or overall rate cases. The general railway rate  
22 cases came either in the period 1918-22 (or at  
23 most 1912-27) and 1948-to-date. In the remaining  
24 years since 1904 the Board has dealt solely with  
25 individual rate adjustments. The telephone cases  
26 were in 1912, 1920-21, 1927, and 1950 to date.

27 We have dealt at length with the railroads  
28 because they offer the nearest example of the type  
29 of competition now encountered from gas, that is  
30





1 to say rates offered as a result of unused capacity  
2 and based on marginal rather than total costs.

3 (By marginal cost is meant an increment of genuinely  
4 variable cost associated with a limited increase in  
5 volume, expressed on a per unit basis).

6 At the same time we recognize that the  
7 competition between gas and coal is not in all  
8 respects the same as competition between one  
9 railroad company and another. In the case of the  
10 American railroads service continued to be offered  
11 by the competing carriers, though at ruinously  
12 low rates which were eventually corrected by  
13 government regulation. In the case of today's  
14 competition between coal and gas, on the other  
15 hand, events may be expected to follow a some-  
16 what different course. There is no reason to believe,  
17 in the case of industrial coal, that marginal-cost  
18 pricing, on the part of docks or dealer in  
19 response to competition from gas, can enable  
20 marked reductions in coal prices. Such reductions  
21 could be made only with the aid of a government  
22 subsidy or by establishing a complete monopoly  
23 embracing both coal and oil.

24 In the nature of things the marginal cost of  
25 acquiring and delivering coal rarely fall much  
26 below average cost. Whereas some part of a  
27 flow of hydro electricity or natural gas may be  
28 thought of, at least over short periods, as in  
29 the nature of a costless surplus, spilling out  
30







1 almost gratis as it were from the company's own  
2 lines, every ton of delivered coal in effect  
3 carries with it an invoice showing that most of  
4 the value of each ton actually represents cash  
5 payments to others. These payments serve to  
6 defray

7 (a) the cost per ton at the mine  
8 (b) the inward freight charges per ton  
9 (c) the out-of-pocket cost of local handling  
10 and delivery.

11 The only components of cost not included  
12 in these items are the constant cost of the dock  
13 operators and/or retailers. While these constant  
14 costs are the principal ones at the level of dock  
15 handling, they form only a small part (between  
16 5 and 10 per cent) of the final delivered cost of  
17 coal.

18 Thus, despite coal's low average cost per B.  
19 t.u., it cannot be brought into consuming areas  
20 at dump prices, there being no segment of virtually  
21 costless supply which coal dealers can offer to  
22 a selected group of consumers at cut prices in  
23 order to compete with dumped gas. Owing to  
24 competition, moreover, there is no segment of  
25 the market in which coal can be sold at sub-  
26 stantially above average cost to yield an off-  
27 setting profit.

28 Since, then, the coal trade cannot defend  
29 its position effectively by resorting to marginal-  
30



1 cost pricing, the result of large-scale seasonal  
 2 dumping of gas is likely to be either no coal or  
 3 dearer coal, other things being the same, and to the  
 4 extent that dock operations became inadequate,  
 5 a less secure fuel supply in the winter. The con-  
 6 sequences for the community are of the same broad  
 7 nature as in the examples cited from railroads and  
 8 public utilities, despite differences in the details.  
 9 We hold that these consequences are of sufficient  
 10 importance to justify the attention of a suitable  
 11 public authority.

12  
 13 VII. WASTEFUL USE OF A SCARCE NATURAL RESOURCE

14 On the question of natural resources, Western  
 15 Canada's supplies of natural gas, though enormous,  
 16 are small when compared with the pace at which  
 17 gas is being used on this continent. We understand  
 18 that the present Canadian gas reserves are equal  
 19 to between two and three years' American con-  
 20 sumption. While alarmists' predictions of early  
 21 exhaustion have time and again been disproved by  
 22 the event, a long view of affairs must surely  
 23 lead us to deplore not only the flaring of gas but  
 24 also the massive use of gas for purposes equally  
 25 well served by more abundant and, on the average,  
 26 cheaper fuels. The energy locked in coal reserves is  
 27 almost infinitely more abundant, and both coal  
 28 and oil are more transportable and more readily  
 29 stored. It may be true that the abundant oil  
 30







1 of Arabia (if not seized by a hostile power) could  
2 relieve the shortages of this continent for generations  
3 or centuries, but it is impossible to transport the  
4 natural gas of Arabia or any other continent to  
5 North America except as a liquid, and at heavy cost.  
6 Since this continent cannot draw on others for  
7 economical supplies of gas, as its own become  
8 scarce, there is more reason to conserve gas than oil.

9       The advantages of gas for special uses  
10 are recognized by everyone, and for these uses  
11 it is clear that many consumers are prepared to  
12 pay a somewhat higher price for gas, per B.t.u.  
13 than for other fuel. These may be called the uses  
14 of high civilian priority and the degree of  
15 priority is indicated by the premium which gas  
16 can command over other fuels.

17       We are aware that measures to conserve  
18 gas, in the interests of prolonging its supply  
19 for uses of high civilian priority, raise difficult  
20 problems especially as to the probable length of life  
21 of the reserves and the appropriate rate of interest  
22 to apply in reducing the money value of future use  
23 of gas to present value. We do not presume to enter  
24 this important but rather conjectural field. We  
25 are also aware that there is room for disagreement  
26 on the exact point at which the sale of gas for  
27 purposes of low civilian priority should be re-  
28 stricted, and on whether the restrictions should be  
29 applied to end-use or to price. We hold, however,  
30







1 that the burning of immense quantities of gas under  
2 steam boilers is a use of such low priority, and  
3 will exhaust such a large part of the nation's  
4 reserves, that it places this use of gas definitely  
5 outside the permissible area from the standpoint  
6 of national benefit, except where it can be shown  
7 that the only alternative is for the gas to be  
8 wholly wasted. Almost anything that burns briskly  
9 can boil water at a price, and coal does so remarkably  
10 cheaply, especially in modern installations. The  
11 burning of gas for boiler fuel should therefore be  
12 the first and the main use to be discouraged.

13 In this connection we understand that some  
14 two-thirds of Trans-Canada's supply of gas is not  
15 associated with oil, and hence need not be regarded  
16 as doomed to be lost if not used now. (Hearings,  
17 February 24, 1958, page 2293.)

18 Important discoveries of gas are still  
19 being made in Western Canada and an impression  
20 seems to be gaining ground that the supplies are  
21 unlimited. We understand, however, that while  
22 Western Canada's ultimate reserves are very large,  
23 they are confined to a geological area which is  
24 relatively small compared with the United States  
25 fields, and hence are correspondingly limited  
26 as to both the recoverable quantity of gas and  
27 the annual rate at which it can be economically  
28 withdrawn.

29 In the nature of things the supply of gas  
30





1 is prone to get out of step with the market. The  
2 supply becomes available in advance of demand  
3 because gas is often found as an incident in the  
4 search for oil. In this situation the self-  
5 regulating mechanism of the market-place cannot  
6 be relied upon to impose a sensitive check upon  
7 gas supply in the event of a glut, and thereby  
8 conserve the resource. This being so, deliberate  
9 measures for conservation seem necessary. If such  
10 measures are not adopted an irreplaceable fuel  
11 resource, having unique properties for certain uses,  
12 will be consumed far more rapidly than would seem  
13 desirable from the standpoint of national interest.

14 There appears to be a conflict between the  
15 economics of distribution by long-distance pipeline  
16 and the economics of conservation. It is true  
17 that without a pipeline the gas cannot be used, and  
18 a fraction of it will run to waste. With a pipeline  
19 however, the gas tends to be thrown on the market  
20 more quickly than its relatively limited supply  
21 justifies, in order to add something (probably little)  
22 to the revenues of the line.

23  
24 VII.1. SUMMARY OF PARTS I - VII

25 Before offering our recommendations we wish to  
26 summarize the submission thus far, as follows:

- 27 1. If Trans-Canada's forecast prove correct,  
28 natural gas sold for industrial purposes  
29 will displace between one-quarter and  
30







one-half of the combined industrial consumption of coal and fuel oil

2. The loss of tonnage to gas is expected to occur mainly in the warm months. In the winter months, on the other hand, dumped gas will not be available, hence the former peak in the winter demand for industrial coal would remain. The docks' annual load factor would fall and average handling costs per ton would rise.

3. As the rise in average costs would be appreciable, it would lead, in one way or another to either (a) higher selling prices for coal from the docks, or (b) the complete cessation of dock operations.

4. Higher selling prices for coal would be followed by higher rates for industrial gas, and industrial coal customers using summer gas for boiler fuel would before long find that under the new arrangements their combined annual fuel costs were either the same or higher.

5. Other large customers, who use boiler fuel mainly for space heating in winter months, will not be in a position to avail themselves of much dumped gas. They would find, owing to the unused capacity elsewhere caused by gas, that their outlay for other fuel had risen. Thus more competition would lead to





- 1 higher rather than lower prices, a well-  
2 known paradox in the field of public utilities.  
3 6. If the supply of dumped gas subsequently  
4 diminishes, more industrial coal will be  
5 needed to take its place, especially in  
6 the summer. In the meantime, however, some  
7 of the very limited dock space suitable  
8 for coal storage may have been converted  
9 irrevocably to other uses, delaying or  
10 preventing a resumption of assured supplies  
11 of low-cost coal.  
12 7. Dumped gas thus gives rise to a most  
13 unusual competitive situation, one which  
14 is in a class by itself owing to its per-  
15 iodicity, its extent, and the likelihood that  
16 it will eventually subside as gas becomes  
17 relatively scarcer. The situation recalls  
18 an early period of ruinous competition  
19 among American railroads.  
20 8. In American railroads, competition arising  
21 from unused capacity and based on marginal  
22 -cost pricing led to an impasse rather  
23 than a workable equilibrium. It necessitated  
24 the intervention of a rate-making authority  
25 in the interests of solvency and continuity  
26 of service. Competition between gas and coal  
27 under similar conditions of unused capacity is  
28 not however identical with that between rail-  
29 roads because of the different relations be-  
30 tween the respective marginal and average





costs. Industrial coal cannot be sold continually at dump prices, as much gas can, nor can it be sold at monopolistically enhanced prices to householders.

9. Natural gas is comparatively scarce, when compared with its present rate of consumption in North America, and is much scarcer than oil. The resources of coal are by comparison almost unlimited, and they yield heat at a very low average cost.

10. Neither the mechanism of the competitive market nor the policy of pipeline companies with unused capacity can be counted on to conserve gas for uses of high priority. Public intervention seems the only effective method of conservation.

#### IX. RECOMMENDATIONS

Our principal recommendations refer to (a) the allocation of costs under-lying the rate structure for gas, (b) rates for industrial gas and the question of undue preference to large consumers, (c) restriction of the use of gas for certain purposes of low priority, (d) the question of a National Energy Board, (e) the procedure of regulatory boards generally, and (f) drawbacks against the import duty on coal.

(a) We understand from the submission of Trans-Canada that its rates were designed on the basis of a cost-allocation method







1 used by the Federal Power Commission of  
2 the United States. We trust that you will  
3 see fit to inquire into the details of  
4 the Power Commission's method and that  
5 employed by Trans-Canada, with a view  
6 to ensuring that the resulting rate  
7 structure recovers a reasonable proportion  
8 of the cost of serving the various classes  
9 of customers and that it does so without  
10 unjust discrimination or undue preference.

11 -----  
12 (b) At present both Trans-Canada and the local  
13 distributing companies seek to justify their  
14 interlocking structure of dump rates on the  
15 ground that such rates are necessary for  
16 securing the traffic. We suggest that  
17 in weighing this argument the considerations  
18 outlined in The Transport Act may prove  
19 helpful. Section 26 of the Transport Act  
20 provides that the Board of Transport Com-  
21 missioners, when deciding whether a pro-  
22 posed lower rate does or does not amount  
23 to an undue preference or an unjust dis-  
24 crimination,

25 "may consider whether such lower toll, or  
26 difference in treatment, is necessary for the  
27 purpose of securing, in the interests of  
28 the public, the traffic in respect of  
29 which it is made, and whether such object  
30 cannot be attained without unduly reducing  
the higher tolls."

as we understand this section, when taken  
along with section 23, it enables the Board





1 to allow or disallow a discriminatory  
2 reduction in the light of a broad consideration  
3 of the public interest, and in the light of  
4 alternative policies for enhancing earning  
5 power.

6 If similar scope were given to an authority  
7 empowered to deal with gas, our position  
8 could be stated as follows. We hold that  
9 certain of the reduced rates for industrial gas  
10 amount to an undue preference or unjust  
11 discrimination, and should be disallowed, on  
12 the grounds,

13 (1) That the resulting disturbance to the inflow  
14 and winter stockpiling of water-borne coal,  
15 the consequent increase in unit costs, and  
16 the associated irregularity in gas supply;  
17 would be against the public interest, and

18 (2) that the objective of maintaining the summer  
19 traffic in gas could be attained in Ontario,  
20 to a greater degree than now contemplated,  
21 by the delivery of surplus summer gas to  
22 underground storage for use during the winter.

23 This recommendation refers not only to regulation of  
24 Trans-Canada's descending rate scale, but, with  
25 appropriate changes, to the rates of local distri-  
26 buting companies which in Quebec are regulated by  
27 the Provincial Electricity Board and in Ontario  
28 by the Ontario Fuel Board.  
29  
30







(c) We suggest that consideration also be given to restricting or prohibiting the use of natural gas as industrial boiler fuel. We understand that most of the gas sold for this purpose adds a relatively small sum per m. cf. to the revenues of the companies, while it is obvious that it burns up vast quantities of a comparatively scarce natural resource which could before long be put to much more valuable uses. We do not feel in a position to suggest the exaction form of control, but it is evident that several forms are possible such as (1) a minimum price, already referred to in broader terms in (b) above, (2) prohibition of certain end-uses, (3) quotas for certain end-uses, and (4) restriction of the total amount or proportion of gas offered on other than a firm twelve-month basis. The last of these implies whatever complementary public measures might be needed for hastening the increase of summer storage.

In connection with the above proposals we suggest that the Government consider modifying, in the case of the Northern Ontario Crown Pipeline Corporation, certain minor terms of the contract which add to the existing incentive to press the sale of gas for inferior uses.

-----





1 (d) From the Commission's terms of  
2 reference, part (c) it appears that the  
3 Government has already decided to establish  
4 a National Energy Board, and the Commission  
5 is asked to confine its recommendations  
6 to the Board's jurisdiction, administration  
7 and procedure. In view of the wide scope  
8 of the final clause in the terms of reference,  
9 however, we beg to question whether a National  
10 Energy Board would provide the most suitable  
11 form of organization for dealing with energy  
12 problems. We are disturbed by the extent of  
13 the power often exercised by semi-autonomous  
14 regulatory bodies, and are impressed by  
15 the need for publicity as to their actions,  
16 for appeal from their decisions, and for  
17 occasional review of their influence on the  
18 economic system. We favour legislation which  
19 would bring the public aspects of the energy  
20 industries under the direct scope of a  
21 single government department.

-----

23 (e) We also wish to add a recommendation  
24 on the conduct of hearings before the public  
25 regulatory bodies, whether national or  
26 provincial. We believe that in the public  
27 interest the hearings before such bodies  
28 should be open, that their findings should  
29 be a matter of public record and that all  
30 interested parties should be given ample and  
duly publicized opportunity







1 to submit their views in advance of each  
2 rate authorization.  
3

4 -----  
5 (f) Finally we wish to make a suggestion  
6 concerning the drawbacks allowed against  
7 the import duty on coal, not discussed above.  
8 Drawbacks are now allowed in the case of coal  
9 used for making both salt and coke (the latter  
10 in conjunction with free entry of foreign coke)  
11 while exemption from duty is allowed on bunker  
12 coal used by ships moving in international  
13 waters. We propose that the drawbacks against  
14 duty be extended to coal used in the production  
15 of goods for export or, at the least, to coal  
16 used by the rather small number of major export  
17 industries.  
18

19 -----  
20  
21 In conclusion, we will be glad to give  
22 additional information or explanations on matters  
23 within our scope.

24 All of which is respectfully submitted.  
25

26 -----  
27 APPENDIX - PART B - (1)

28 NOTES ON THE DEVELOPMENT OF THE WATER-BORNE COAL  
29 TRADE IN THE TORONTO AREA, AS INFLUENCED BY THE WELLAND  
30 SHIP CANAL AND AUTOMOTIVE TRANSPORT.

(Reproduced from the submission of the Toronto Coal  
Exchange to the Royal Commission on Coal, 1945, pp.31-  
36.) Also in hearings (1945) pp. 4600-4606.





## APPENDIX - PART A

The following is a list of the principal submissions to the Royal Commission on Coal, 1945, bearing on the supply of bituminous coal in the Great Lakes area. While wartime problems naturally received much attention in 1945, the organization, technology and cost of freight and handling were also described, especially in Exhibits 229 and 231, passages from which are reproduced in Part B below.

## I. SUBMISSIONS ON THE IMPORT, DISTRIBUTION AND USE OF COAL, 1945.

<u>Number Exhibit</u>	<u>By Whom Submitted</u>	<u>Witness</u>	<u>Page in Hearings</u>
175	Hamilton By-Product Coke Ovens, Ltd.,	H.G. Henry	3078-3093
176	Fort William Dock Co.	S.R. Freed	3094-3116
177	Industrial Consumers of Coal in Hamilton	R.W. Angus	3116-3132
179	Owen Sound Board of Trade	F.W. Smith	3146-3165
180	James Murphy Coal Co., Fort William	F.C. Murphy	3166-3179
181	Lakehead Fuel Dealers	F.C. Murphy	3180-3186
183	Fuel Protective Association of Hamilton	-	3193-3196
184	E.A. Allcut, University of Toronto "A Fuel Policy for Canada"	E.A. Allcut	3197-3210
185	Toronto Retail Dealers Association	W.A. Gunn	3211-3216
194	Rochester and Pittsburgh Coal Co. (Canada) Ltd. (re duty on bunker coal at Montreal)	T. Walsh	3401-3405
229	Toronto Coal Exchange	M.J. Patton	4567-4637
231	Nineteen Canadian Importers and Distributors of Bituminous Coal	H.J. Stuart D.C. MacGregor	4715-4794
232	Montreal Coke and Manufacturing Co.	D.G. Munroe	4794-4808
248	The Coal Control (Ottawa)	C.L. O'Brian E.J. Brunning	4879-4988
260	Dominion Fuel Board (Activities of, Vol. 1)	F.G. Neate	5116-5196
261	Dominion Fuel Board (Activities of, Vol. 2)	F.G. Neate	5197-5345



## APPENDIX - PART A

II. SUBMISSIONS ON THE COAL MINES AND THE TRANSPORTATION OF COAL  
BY RAIL TO THE SHORES OF THE GREAT LAKES: A SELECTED LIST

<u>Exhibit</u>	<u>By Whom Submitted</u>	<u>Witness</u>	<u>Page in Hearings</u>
13	National Coal Association	H.A. Glover	4237-4256
14	Consolidation Coal Co. and others	A.B. McElvany	4256-4313
15	United States Coal Producing District No. 8	R.E. Howe	4313-4335
25	Twenty-seven Coal Carrying Railroads of the United States	R.S. Kern	4377-4404
56	Illinois Coal Traffic Bureau	C.W. Stadell	5079-5100
58	Group of United States Railway Companies	R.G. Raasch	5102-5111
59	Kentucky Coal Agency, Inc.	H.C. Moore	5111-5116





## FUEL HISTORY

By reason of Toronto's location on lake Ontario, anthracite coal became available by water soon after the Pennsylvania fields began to be developed and railways were built connecting them with the south shores of Lake Erie and Lake Ontario. Thus the city was early educated to the use of anthracite, which was found to be a very acceptable as well as a readily available fuel. From a population of 59,000 in 1871 the city grew rapidly, and as anthracite was the standard fuel, burning equipment and flues and chimneys were built to burn it rather than bituminous coal.

## HORSE-AND-WAGON DAYS --- INLAND YARDS

During the latter part of the 19th century and the early part of the 20th, a number of small coal docks were constructed along the waterfront in the neighbourhood of Church and Parliament streets. Sailing vessels and, later, tugs and barges, brought coal across the lakes to these docks and from there it was distributed throughout the city by horse and wagon. The delivery range of a horse and wagon is limited, and as the city grew and railway facilities became available to the then outlying sections of the city, inland railway yards for the storage and sale of coal sprang up, and the coal began coming in by an all-rail movement from the United States through the Niagara gateway.

During this period the old Welland Canal (depth 14 feet) was available for ships of limited





1 tonnage from Lake Erie, and coal from the Ohio and  
2 Southern fields came in by that route to storage  
3 accommodation around Toronto Bay. This coal, however,  
4 was nearly all for industrial use. Coal for domestic  
5 use did not come into Toronto through the canal in  
6 any appreciable quantity until the new and deeper  
7 Welland Ship Canal was built.

#### 8 HARBOUR DEVELOPMENT

9 In 1914 the city and the Dominion Government,  
10 through the medium of The Toronto Harbour Commissioners,  
11 began a program of broad development of the Toronto  
12 waterfront that necessitated railway grade separation  
13 and the construction of the present viaduct along the  
14 waterfront for the two railways.

#### 15 APPENDIX - PART B - (1)

16 This program involved the elimination of  
17 the existing coal docks, and the fuel importing  
18 interests who owned them practically all secured  
19 inland yards on railway sidings throughout the city.

#### 20 WAR AND STRIKES FORCE USE OF NEW FUELS

21 During the latter part of World War I fuel  
22 was difficult to obtain, and in 1922 there was a  
23 long-drawn-out strike in the Pennsylvania anthracite  
24 mines which brought hardship to Toronto householders.  
25 During this period any and every kind of available fuel,  
26 including bituminous coal, was brought in and burned for  
27 domestic heating purposes. At this time, too, limited  
28 quantities of by-product coke were imported from steel  
29 plants in the United States where the by-product coke  
30 ovens were replacing the old wasteful beehive ovens, and







found to be a very satisfactory domestic fuel.

1 Similarly during the 1920-30 period, Poconontas  
2 coals, which are high-grade low-volatile bituminous  
3 coals, were imported for the first time and found to be  
4 usable in Toronto equipment. On the other hand, it was  
5 shown that medium - and high-volatile coals were  
6 too smoky for the equipment and chimneys and they met  
7 with great disfavour, except as emergency fuels.  
8 The city's smoke by-laws will not permit the emission  
9 of smoke for a longer period than six minutes per hour.  
10 Another prolonged strike occurred in the anthracite  
11 regions in 1925 and it was again necessary to bring  
12 in many types of substitute fuels to make up the  
13 shortage of anthracite. Incidentally, there has been  
14 no major strike in the anthracite fields since then  
15 seriously affecting the Toronto area.

16 It was during the 1920-30 period that by-  
17 product coke ovens were constructed in Canada,  
18 largely as a result of the report of J.L. Landt,  
19 a United States engineer retained by the Dominion  
20 Fuel Board to inquire into the feasibility of making  
21 by-product coke in Canada. The Hamilton By-Product  
22 Coke Ovens, completed in 1925, marketed considerable  
23 of their product in the Toronto area, and the Steel  
24 Co. of Canada at Hamilton also manufactured coke,  
25 some of their excess production being for domestic  
26 heating purposes. The coke ovens of the Algoma  
27 Steel Co. at Sault Ste. Marie originally built in 1911  
28 primarily for making blast furnace coke were rebuilt and  
29 extended in 1919 and again in 1937. These ovens, though  
30 distant from Toronto, sell by-product domestic coke here







1 at times, as do also the many steel plants operating  
2 in the states bordering on the Great Lakes. By-product  
3 coke has proved to be a satisfactory domestic fuel  
4 and meets anthracite competition at competitive prices.

5 WELSH COAL INTRODUCED

6 It was during the period 1922-30 that Welsh  
7 coal was introduced to the Toronto market. Large  
8 quantities of this splendid quality anthracite  
9 in small sizes became available for this market and the  
10 blower furnace was developed to burn it. A considerable  
11 tonnage of large-size Welsh coal was imported also,  
12 which came in direct competition with United States  
13 anthracite. World War 11 has cut off supplies of  
14 this fuel temporarily, as reference to the table on  
15 page 5 shows, but supplies are expected to be  
16 available again in a few years.

17 COAL DOCKS AND SELF-UNLOADER VESSELS

18 The rise and extension of docks in the distrib-  
19 ution of solid fuels is nowhere better illustrated  
20 than in Toronto. Following the opening of the  
21 new Welland Ship Canal in 1930, which permitted  
22 large upper lake vessels to enter Lake Ontario,  
23 dock space for the storage of coal became available  
24 in the new Toronto Harbour development the following  
25 year. Prior to the opening of the new Welland Ship  
26 Canal, some small self-unloader vessels brought  
27 coal in through the old Welland Canal, but these  
28 had short unloader booms and were able to utilize  
29 only a narrow strip approximately 100 feet in depth,  
30 along the edge of Toronto Bay. Now larger self-





1 unloader boats capable of unloading coal twice that  
2 distance inland came into use.

3 Plans of the Toronto Harbour Commissioners  
4 provided for the segregation of coal storage at  
5 the eastern end of the harbour area and around the  
6 ship channel. Coal docks were opened up immediately  
7 this area became available, and by 1935 eleven  
8 companies were in occupation of 89.25 acres on long-  
9 term leases from the Commissioners. The dock area  
10 was rapidly developed, since coal brought in by  
11 large boats could be delivered by truck from the  
12 docks to the different plants and other consumers  
13 around Toronto at a lower price than all-rail coal,  
14 and when this movement was once started many of  
15 the larger coal companies then supplying coal all-  
16 rail to this area made arrangements to move coal  
17 by lake-and-rail in order to compete. Larger areas  
18 were thrown open for coal docks on the water-front  
19 and by 1945 eighteen companies occupied an area of  
20 150 acres with docks.

21 Bituminous and anthracite coals and coke are  
22 stored on the docks, screening facilities have also  
23 been erected, and systems of belt conveyors have  
24 been installed on some docks which carry the coal back  
25 for storage as far as 800 to 1000 feet from the water-  
26 front. Coal distributing companies have invested  
27 millions of dollars in this dock development.  
28  
29  
30





## APPENDIX - PART B - (1)

Water-Borne Fuel Movement

Growth of the water-borne fuel movement into Toronto is shown by the following table:

## SOLID FUELS IMPORTED BY WATER INTO TORONTO

Calendar Years - Net Tons

(Subsequent Figures Added)

1901-1910 .....	155,415 tons (average)	1943 .....	1,861,444 tons
1928 .....	150,099 "	1944 .....	1,906,007 "
1929 .....	191,299 "	1945 .....	1,735,719 "
1930 .....	225,992 "	1946 .....	1,405,124 "
1931 .....	560,347 "	1947 .....	1,721,016 "
1932 .....	1,062,994 "	1948 .....	1,971,677 "
1933 .....	1,325,567 "	1949 .....	1,322,093 "
1934 .....	1,667,537 "	1950 .....	1,963,478 "
1935 .....	1,565,264 "	1951 .....	1,928,360 "
1936 .....	1,631,603 "	1952 .....	1,801,269 "
1937 .....	1,726,966 "	1953 .....	2,213,470 "
1938 .....	1,574,700 "	1954 .....	1,761,509 "
1939 .....	1,767,131 "	1955 .....	1,401,154 "
1940 .....	2,224,381 "	1956 .....	2,090,457 "
1941 .....	1,886,068 "	1957 .....	2,137,692 "
1942 .....	1,968,542 "		

The above includes anthracite coal, which however does not move in large amounts by water. The average for 1901-1910 has been added to the table originally published, and is from the same source.)

Similar growth in water-borne imports into Hamilton, the other large port on the west end of Lake Ontario, is shown in the table following:



## APPENDIX - PART B - (1)

## SOLID FUELS IMPORTED BY WATER INTO HAMILTON

Calendar Years - Net Tons

(Subsequent Figures Added )

1927	.....	70,000 tons	1943	.....	1,475,481 tons
1928	.....	464,561 "	1944	.....	1,546,623 "
1929	.....	797,559 "	1945	.....	1,293,492 "
1930	.....	854,750 "	1946	.....	1,342,834 "
1931	.....	1,006,604 "	1947	.....	1,454,967 "
1932	.....	905,461 "	1948	.....	1,997,374 "
1933	.....	1,227,795 "	1949	.....	1,526,480 "
1934	.....	1,294,981 "	1950	.....	2,087,318 "
1935	.....	1,099,006 "	1951	.....	1,916,213 "
1936	.....	1,291,499 "	1952	.....	2,487,771 "
1937	.....	1,380,654 "	1953	.....	2,878,440 "
1938	.....	1,377,050 "	1954	.....	2,229,741 "
1939	.....	1,270,093 "	1955	.....	2,859,721 "
1940	.....	1,482,520 "	1956	.....	3,054,837 "
1941	.....	1,539,427 "	1957	.....	3,023,302 "
1942	.....	1,571,703 "			





APPENDIX - PART B - (2)

A DESCRIPTION OF THE IMPORTING AND  
WHOLESALE OF UNITED STATES  
BITUMINOUS COAL IN CANADA

(Prepared for the Royal Commission on Coal,  
1945, by the Canadian Importers and Distributors of  
Bituminous Coal, and submitted by them as Appendix A.  
Also in hearings (1945) pp. 4752-4760).

In the past thirty years, there have been,  
quite extensive changes in the methods of burning  
bituminous coal.

These changes, involving as they do the use  
of a wide variety of stokers and powdered fuel units,  
have brought with them special problems of preparation  
and selling methods. Whereas in the earlier days  
"Lump", "Mine Run", and "Slack" were the only sizes  
of coal to be considered in a sale, the use of this  
special equipment calls for skilful selection of the  
right fuel by trained specialists who use the most  
modern and scientific methods of studying the individual  
boiler plant, and make their fuel selection from a  
widely scattered group of mines or mining areas.  
They must combine knowledge of burning requirements  
with knowledge of burning character of coals from different  
mines, different seams and different areas, ranging  
in volatile content from 15-40 per cent, in ash fusion  
from 1900°F to 2800°F, and in ash content from 3-15  
per cent. Structure and sizing of coal must be considered  
as well as the character of the coal, whether light,  
medium or dense coking in type. Further reference







1 will be made to this in the section on fuel burning  
2 equipment.

3 With the introduction of these technical  
4 problems and the application of coal to the job in  
5 an attempt to give the consumer the maximum benefit  
6 from his investment in coal burning equipment, much  
7 closer co-operation has developed between coal producers  
8 and equipment manufacturers in the designing of equipment  
9 and the preparation of the coal.

10 It has followed naturally for the producing  
11 companies to initiate the use of combustion engineers  
12 and technical experts referred to, as the means of  
13 securing best results for the consumer. These men  
14 are able to pass on to regular plant operators valuable  
15 advice and help based on experience in dealing with a  
16 wide variety of applications. Recommendations are  
17 frequently made to the mines relative to the sizing  
18 and preparation of coal which is helpful in meeting  
19 special conditions.

20  
21 APPENDIX - PART B - (2)

22 In Canada, many of the largest United States  
23 producers of bituminous coal have established wholly  
24 or partially owned subsidiaries to represent them in  
25 their dealings with wholesale distributors or with the  
26 purchasing departments of large industrial concerns,  
27 many of which insist on direct contact with their sources  
28 of supply. Competition between these companies  
29 is very keen in all types of distribution.

30 The establishment of docks and large storage





1 inventories at strategic points on the St. Lawrence  
2 River and Great Lakes system has had almost the effect  
3 of moving the mines to consuming areas, with the  
4 additional advantage of having the coal above ground.  
5 Use has been made of publicly owned storage docks  
6 where available, but in some cases coal companies have  
7 had to build their own.

8 Direct rail transportation from mine to con-  
9 sumer is still used where rail sidings and freight rates  
10 justify this movement. However, delivery by  
11 truck lot directly to bins from storage docks without  
12 the further cost of car unloading, as with the rail  
13 movement, has made this type of delivery very attractive.  
14 The assurance of supply when coal is actually stored  
15 in Canada and free of interference from mine strikes  
16 or railway car supply failure has been an additional  
17 factor in favour of this movement. Special equipment  
18 is required by this method of coal transportation such  
19 as large Crawler cranes with buckets, for transferring  
20 coal on the dock in some cases, quick-loading coal  
21 hoppers, screening equipment and in the case of domestic  
22 stoker coals, special dust-treating equipment.

23 Large quantities of coal have always moved  
24 to the head of the Lakes and lower St. Lawrence  
25 destinations in bulk freighter vessels. On arrival,  
26 they are unloaded by expensive coal bridges which were  
27 built for the purpose by wholesale companies or consumers  
28 on their own property. In some cases, the railroads  
29 have built and established coal storage docks for the  
30 handling of their own coal transported by vessel when







1 haulage on their own lines would be an expensive  
2 proposition. In such cases, they frequently handle  
3 commercial coal as well as their own coal over their  
4 docks as in the case of Britt and Prescott, Ontario,  
5 properties of the Canadian Pacific Railway, and the  
6 docks of the Algoma Central and Algoma Eastern Railroads  
7 at Michipicoten, Sault Ste. Marie and Little Current.

8 (NOTE: The dock at Britt was closed in 1957).

9 With the development of the self-unloader  
10 vessel, first of canal size and later, at the time of  
11 the Welland Canal opening, full size, 6-10,000 ton  
12 capacity, capable of unloading at rates varying from  
13 400-1500 tons per hour, there has been made possible  
14 the use of property for coal storage without the neces-  
15 sity of building expensive bridges. Supplementary  
16 conveyor belts and stackers made the use of great depth  
17 of property from the unloading point easily possible.

18 Special small self-unloader vessels are used  
19 for delivery in shallow-draught areas such as the Bay  
20 of Quinte, Napanee River, Gananoque and various  
21 destinations on Georgian Bay and Lake Erie. By  
22 means of these self-unloaders, long haul railway trans-  
23 portation has been reduced to a minimum and less  
24 expensive vessel transportation has made possible the  
25 delivery of coal to consumers at very low cost.

26 Actual distribution of coal from mine to  
27 consumer is accomplished:

28 (a) By direct rail from the mine to the  
29 consumer's siding where he unloads it, or  
30 to some other siding nearby where it is





1 unloaded under the auspices of a retail or  
2 wholesale coal company which has the equipment  
3 or may hire the service performed. In  
4 such case, it is the usual practice for the  
5 wholesaler to purchase the coal at the mine  
6 and arrange for shipment in his own name,  
7 giving the consumer a landed cost in his  
8 bins.

9 (b) By vessel movement to consumer's  
10 own dock or to a wholesale or commercial dock.

11 In the case of coal transported by vessel, it  
12 is well to have some knowledge of the details of the  
13 movement. Generally speaking, coal for central  
14 Canada originates in one of the following Districts of  
15 the United States:-

- 16 1. Central Pennsylvania
- 17 2. Western Pennsylvania
- 18 3. Northern West Virginia
- 19 4. Ohio
- 20 6. West Virginia Pan Handle
- 21 7. Virginia and Part of West Virginia
- 22 8. Southern high volatile

23 Coal from Districts 1-2 and 3 can move to  
24 Lake Ontario Ports of Sodus, Oswego, and Charlotte,  
25 with some exceptions from which ports it could load  
26 for St. Lawrence River Ports and Lake Ontario destinations.

27 Coal is loaded on Lake Erie from all of the  
28 District indicated. Large tonnages move through  
29 loading ports of Buffalo, N.Y., Erie, Pennsylvania,  
30 Ashtabula, Cleveland, Fairport, Lorain, Sandusky and







1 Toledo, Ohio. This coal originates on such rail-  
2 roads as:-

3 District 1 - B&O, PRR, NYC, P&S, PS&N, Erie,  
4 C&I, LEF&C, Western Maryland

5 District 2 - B&O, B&LE, PRR, P&LE, Montour,  
6 Pittsburgh & West Va.

7 District 3 - B&O, Monogahela, Western Maryland

8 District 4 - B&O, PRR, NYC, W&LE, C&O

9 District 6 - B&O, PRR

10 District 7 - C&O, Interstate, N&W, Virginian

11 District 8 - C&O, CC&O, KC&NW Railway, K&M  
12 Railway (NYC), I&N, N&W

13 By various routes these shipments arrive  
14 at Lake Dumping Ports where they come under the  
15 supervision of the Ore & Coal Exchange. The duty  
16 of this organization is to secure quick unloading of  
17 cars and efficient movement along the route so that  
18 cars may be returned promptly to originating railroads...

19 Docks may be ready to receive the coal on  
20 arrival of vessels. This requires careful planning  
21 of the shipments that will be made in each and every  
22 month. Some coals break down in storage more  
23 than others. These must be shipped as late in the  
24 navigation season as possible. Some coals store  
25 better than others and a vast amount of knowledge has  
26 been developed on proper methods of storage, including  
27 the impacting on arrival of the finer sizes. Some-  
28 times it is necessary to transship coal over a dock and  
29 have the space available quickly for following shipments.  
30 In such cases trucking arrangements must be co-ordinated







1 with coal arrival.

2 With coal moving in such large volume during  
3 the summer season, the mines must plan production to  
4 take care of these requirements. Often the sizes  
5 required in one area in Canada may cause an unbalanced  
6 position at the mines in relation to other sizes.  
7 Outlets must be found that will permit the entire  
8 programme to be carried out. Sometimes stoker  
9 sizes for Canada will be made possible by movement of  
10 top sizes in the U.S. and Slack sizes in some other  
11 areas of Canada or vice versa.

12 Docks have been established at every point  
13 along the North Ontario shore which can be reached  
14 by vessels having capacity as low as 600 tons.

15 Close control of vessels involved in coal  
16 transportation must be maintained. This is a func-  
17 tion of Coal Traffic Departments. Co-operation  
18 of the keenest kind is required to avoid or keep  
19 down demurrage costs on cars at ports waiting for  
20 vessels to take the cargo. During periods of un-  
21 certain production, such costs can reach serious  
22 proportions.

23 Frequently it is necessary to ship from widely  
24 scattered areas to the same port for loading into the  
25 same vessel for delivery at the same Canadian  
26 destination. Very infrequently deliveries are  
27 necessary from the same vessel to two Canadian  
28 destinations....

29 Vessels are divided into compartments.  
30 Separate weights can be obtained for each. As many





1 as five different kinds or sizes of coal may be  
2 carried in a vessel at the same time, depending on its  
3 size and compartment arrangement. Most self-unloader  
4 vessels have hopper-type holds under which operate  
5 conveyer belts. These carry the coal to the front  
6 of the vessel where it is raised on a bucket conveying  
7 system, dumped into a chute which feeds another  
8 conveyor belt operating on the unloading arm or "boom".  
9 This boom extends over the side of the vessel above the  
10 dock. It can be raised or lowered or swung  
11 horizontally as required into the exact position  
12 desired for unloading, by controlling cables operated  
13 by winches on the vessel. The coal flows over  
14 the belt and falls on to the dock. Some breakage  
15 occurs initially but as the pile grows, it is possible  
16 to control this breakage to a considerable extent by  
17 careful operation of the unloading boom. As mentioned,  
18 the rate of discharge may be as high as 1500 tons per  
19 hour from large self-unloaders.

20 On arrival at the storage dock of a whole-  
21 saler, the coal may be added to piles of the same grade  
22 and size representing the amassed orders of a number of  
23 consumers. It can be removed as required, weighed  
24 over dock scales and invoiced on truck weights.

25 It can be seen since approximately 75 per  
26 cent of Canada's coal requirements are carried by  
27 vessels during the navigation season from April 1st  
28 to November 30th in each year, quite complete and  
29 efficient firms are necessary in order to  
30







- (a) have the right amount of coal
- (b) of the right grade
- (c) in the right place
- (d) at the right time.

In addition to the factors mentioned, there are further responsibilities such as the problems of exchange, financing of large quantities of coal, credit risk involved in sales, degradation of coal in storage, method of handling, screening, disposition of resultant coals on an economical basis, and also storage with its problems of spontaneous combustion and wastage.

Smoke ordinances of various communities make necessary the securing of coal for consumers which will operate in harmony with such regulations.

The ability to use large capacity vessels with their reduced transportation cost and ability to avoid demurrage charges on cars awaiting dumping into vessels is only possible through the amassing of orders and pooling of tonnage.

The funds to pay for large quantities must be made available and credit responsibility maintained.

The advantages of large scale operations are passed on to the smaller retailers through these organizations, making it possible for them to buy truck-loads of various coals for delivery to consumers requiring different types, without the necessity of the retailer having to ship separate cars of each to his own yard and tie up his limited storage facilities for long periods by so doing.





1 Consumption of coal in private homes, whether  
2 used in domestic stokers or not, makes necessary  
3 special equipment for the sizing and dust-treating of  
4 coals. This can be taken care of in the most  
5 economical manner by doing it on a large scale, which  
6 such wholesale dock operations permit.

7 Arrangements for coal with sources of coal  
8 supply must be predicated on the needs of the area  
9 served. Experience of many years makes it possible  
10 for this group of distributors to estimate with fair  
11 accuracy those requirements, and to give an indication  
12 to shippers of the quantities which can be accepted  
13 during each month of the navigation season.

14 Production schedules of the producing companies  
15 are set up early in the year and it is necessary that  
16 proper arrangements be made to have the required  
17 tonnages included in their production programmes.

18 It is quite evident that to ensure shipment,  
19 orders must go to the U.S. suppliers very early in the  
20 year but it may be a surprise to know that contracts  
21 are sometimes completed for shipments with the mines  
22 by the end of February. A close check on industrial  
23 activity must be maintained and ability to make rapid  
24 adjustments in case of necessity is of prime importance.

25 Close co-operation with shippers throughout  
26 the year is necessary to maintain the flow of coal  
27 evenly and surely throughout the season.  
28  
29  
30





## APPENDIX - PART C

MEMBERS OF THE CANADIAN COMMERCIAL COAL DOCK OPERATORS ASSOCIATION

C. L. Amos Coal Company (Canada) Limited	Montreal, Quebec
S. Anglin Company Limited	Kingston, Ontario
Canada Coal Limited	Toronto, Ontario
Century Coal Limited	Toronto, Ontario
Confederation Coal & Coke Limited	Windsor, Ontario
Crawford Coal & Fuel Company	Kingston, Ontario
Dalton Fuels Limited	Sarnia, Ontario
The Davis Smith Malone Co. Limited	Owen Sound, Ontario
Empire-Hanna Coal Division, M.A. Hanna Company	Toronto, Ontario
Fort William Coal Dock Co. Ltd.	Fort William, Ontario
Halliday Fuels Limited	Toronto, Ontario
Imperialle Fuels Ltd.	London, Ontario
Industrial Docks & Supplies Limited	Thorold, Ontario
Kingsville Coal & Dock Company	Kingsville, Ontario
The Lake Erie Coal Co. Limited	Walkerville, Ontario
Lyons Fuel, Hardware & Supply Ltd.	Sault Ste. Marie, Ontario
McLaughlin Coal & Supplies Ltd.	Oshawa, Ontario
McMaster Fuels Ltd.	Sault Ste. Marie, Ontario
James Murphy Coal Company	Fort William, Ontario
Myers Coal Company Limited	Hamilton, Ontario
B. W. Powers & Son	Trenton, Ontario
W. B. Reynolds Coal Co. Limited	Brockville, Ontario
Rochester & Pittsburgh Coal Co. (Canada) Limited	Toronto, Ontario
Scotch Anthracite Coal Co. Limited	Montreal, Quebec
Jas. Sowards Coal Co. Limited	Kingston, Ontario
Swift Coal Company	Kingston, Ontario
Toronto Fuels Limited	Toronto, Ontario
The Valley Camp Coal Co. of Canada Ltd.	Toronto, Ontario
Weaver Coal Company	Toronto, Ontario







1           Details of the coal dock costs for handling  
2 various tonnages, the results of which are summarized in  
3 part III of the submission, are presented in the  
4 three following tables for Docks A, B and C.

5           As the tonnages and rental costs in the  
6 tables suggest, Dock A is in a large city, while  
7 Docks B and C are in comparatively small places.  
8 Docks A and B are rented, the former on a long lease,  
9 and Dock C is owned.

10          All three docks are operated by the same  
11 company.       The selling and administrative expenses  
12 of the head office have not been included, owing to  
13 differences between one company and another in the  
14 method of allocating between docks, and in the  
15 allocation as between dock and non-dock (i.e. all-rail)  
16 tonnage.

17          The cases in question show the influence of  
18 constant costs but they do not purport to be  
19 representative of other docks of similar size.  
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## APPENDIX - PART D

DOCK "A"

Forecast of Handling Costs Predicated on Various Annual Movements of 210,000 tons Down to 105,000 tons

	<u>Estimated Annual Tonnage</u>			
	<u>210,000</u>	<u>170,000</u>	<u>140,000</u>	<u>105,000</u>
Net Profit	<u>\$ 10,000</u>	<u>\$ 8,100</u>	<u>\$ 6,600</u>	<u>\$ 5,000</u> x
Operating Expenses:				
Salaries & Wages	71,000	67,000	67,000	63,000
Supplies & Utilities	16,000	14,000	12,000	10,000
Maintenance & Repairs	17,000	16,000	15,000	12,000
General Expense	2,300	2,000	2,000	1,600
Insc., Taxes & Rent	60,000	60,000	60,000	60,000 *
Depreciation	15,000	15,000	15,000	13,000
General & Admin. Expense	<u>15,000</u>	<u>14,000</u>	<u>14,000</u>	<u>14,000</u>
Totals	<u>\$196,300</u>	<u>\$188,000</u>	<u>\$185,000</u>	<u>\$173,600</u>
Per Ton Handling	<u>\$ .93</u>	<u>\$1.10</u>	<u>\$1.32</u>	<u>\$1.65</u>

It will be noted handling costs will increase from 93¢ per ton on an annual movement of 210,000 tons to \$1.65 on a movement of 105,000 tons.

\* - Due to a 10 year lease arrangement it would not be possible to drastically reduce rent to coincide with shrinking tonnage movement.

x - The decrease in net profit, \$10,000 to \$5,000 (210,000 tons - 105,000 tons) is based on maintaining the same rate of profit per ton, in this case 4.76¢.





## APPENDIX - PART D

DOCK "B"

Forecast of Handling Costs Predicated on Annual Movements of 80,000 tons Down  
to 40,000 tons

	<u>Estimated Annual Tonnage</u>		
	<u>80,000</u>	<u>60,000</u>	<u>40,000</u>
Net Profit	<u>\$ 6,000</u>	<u>\$ 4,500</u>	<u>\$ 3,000</u>
Operating Expenses:			
Salaries & Wages	21,000	21,000	17,000
Supplies & Utilities	8,000	7,000	6,000
Maintenance & Repairs	5,400	4,900	4,400
General Expense	300	300	300
Inso., Taxes & Rent	1,400	1,400	1,400
Depreciation	3,400	2,900	2,400
General & Administrative Expense	<u>2,900</u>	<u>2,900</u>	<u>2,900</u>
Total	<u>\$42,400</u>	<u>\$40,400</u>	<u>\$34,400</u>
Per Ton Handling	\$ .53	\$ .67	\$ .86

DOCK "C"

Forecast of Handling Costs Predicated on Annual Movements of 60,000 tons Down  
to 20,000 tons

	<u>Estimated Annual Tonnage</u>		
	<u>60,000</u>	<u>40,000</u>	<u>20,000</u>
Net Profit	<u>\$ 6,000</u>	<u>\$ 4,000</u>	<u>\$ 2,000</u>
Operating Expenses:			
Moving and weighing	\$ 2,850	\$ 1,900	\$ 950
Coal Analysis	200	150	100
Insurance	225	150	75
Taxes	480	480	480
Handling *	<u>29,750</u>	<u>24,000</u>	<u>17,000</u>
Totals	<u>\$33,505</u>	<u>\$26,680</u>	<u>\$18,605</u>
Per Ton Handling	\$ .56	\$ .67	\$ .93

\* - Includes: Dock Wages and Salaries  
Proportion of applicable Dock Office Salaries  
Maintenance and repairs of Loader Equipment  
Depreciation





1  
2  
3 THE SECRETARY: I would like to ask if  
4 Mr. Joseph Wright will make a statement on behalf  
5 of the Weaver Coal Company Limited.  
6  
7

8 SUBMISSIONS ON BEHALF OF THE  
9 WEAVER COAL COMPANY LIMITED  
10

11 APPEARANCES:  
12

13  
14 Mr. Joseph Wright.  
15

16 ---EXHIBIT 12  
17

18 MR. WRIGHT: Mr. Commissioner, I am here  
19 solely to answer any questions I am capable of  
20 answering that you may wish to put before us. I  
21 haven't got a brief.

22 MR. GUNN: You are representing the  
23 Weaver Coal Company Limited, are you, Mr. Wright?

24 MR. WRIGHT: That is true.

25 MR. GUNN: What is the nature of your  
26 business,  
27  
28  
29  
30





1 please?

2 MR. WRIGHT: Handling, selling of wholesale  
3 industrial coal in the Province of Ontario.

4 MR. GUNN: Are you a member of the Canadian  
5 Commercial Coal Operators' Association?

6 MR. WRIGHT: Yes.

7 MR. GUNN: What is your name again?

8 MR. WRIGHT: Joe Wright.

9 MR. GUNN: Of the Weaver Coal Company?

10 MR. WRIGHT: Yes.

11 MR. GUNN: Mr. Wright, does your company  
12 sell Canadian coal?

13 MR. WRIGHT: We do.

14 MR. GUNN: And Canadian coal from where?

15 MR. WRIGHT: From the Maritimes Provinces,  
16 and also Western Canada coal.

17 MR. GUNN: And the producers in Western  
18 Canada are whom?

19 MR. WRIGHT: Practically all the producers  
20 of western coal in Canada.

21 MR. GUNN: I mean Eastern Canada.

22 MR. WRIGHT: The Dominion Coal Company Limited.

23 MR. GUNN: Any other companies down there in  
24 independant pits?

25 MR. WRIGHT: No, not in Ontario.

26 MR. GUNN: Where would your docking facilities  
27 be located?

28 MR. WRIGHT: Toronto, Hamilton and Thorold.

29 MR. GUNN: Of the Eastern Canadian coal how  
30







1 much do you bring into your docking facilities?

2 MR. WRIGHT: I prefer not to answer that.  
3 I prefer to drop you a letter, a confidential letter.  
4 I can say this, that we did bring in three cargoes  
5 to each of our docks in 1958 for test purposes  
6 to see how the coal would act in 1959.

7 MR. GUNN: And how did it act?

8 MR. WRIGHT: Well, unfortunately the type of  
9 equipment in this territory, the majority of the  
10 equipment, the burning equipment, is not suitable  
11 for that type of coal as to size, fusion, etc.

12 MR. GUNN: Do you anticipate then, that the  
13 sale of coal from Eastern Canada be continued?

14 MR. WRIGHT: No, I wouldn't say that.

15 MR. GUNN: What do you think would be  
16 necessary for the increased sale of Eastern coal?  
17 I don't mean by subventions only.

18 MR. WRIGHT: I would say the preparation of  
19 the coal. The coal that came into our markets was  
20 almost one and a quarter slag. That was for  
21 pulverizing units and some chain breakers and  
22 spreader stokers, and we ran quite a few tests on that  
23 type of equipment, that is the chain breaker and  
24 spreader stoker.

25 MR. GUNN: Have you taken the matter up with  
26 the Dominion Coal Company Limited?

27 MR. WRIGHT: Yes.

28 MR. GUNN: And have you received any assurance  
29 from them that they would try to carry out your  
30





1 suggestions?

2 MR. WRIGHT: They are looking into that matter  
3 to see what can be done. But I believe most of  
4 that sizing of coal is used in the Province of Quebec  
5 and I doubt if it could, in the quantities required,  
6 come into this market.

7 MR. GUNN: How about the Western coal?

8 MR. WRIGHT: The Western coals are handled  
9 exclusively in the Western part of Canada, and some  
10 move in a small quantity by rail into the Northern  
11 Ontario. We have sales offices throughout Western  
12 Canada.

13 MR. GUNN: I think that is all I have to ask,  
14 Mr. Commissioner.

15 THE CHAIRMAN: For how long have you been  
16 bringing coal from Nova Scotia to Lake Ontario or  
17 Lake Erie or Lake Huron?

18 MR. WRIGHT: The first coal we brought in, to  
19 my knowledge, or the company's knowledge, was around  
20 1938 or 1939.

21 THE CHAIRMAN: And from that time to the  
22 present time have you been importing it?

23 MR. WRIGHT: No, we haven't been able to until  
24 just lately.

25 THE CHAIRMAN: You mean in 1958?

26 MR. WRIGHT: Yes.

27 THE CHAIRMAN: Between 1937 and 1958 would  
28 you bring any in?

29 MR. WRIGHT: I would say just prior to the war;  
30







1 around 1940, I think, was the last coal we brought  
2 into our docks.

3 THE CHAIRMAN: And up to, say, 1940, were you  
4 bringing it in in quantity?

5 MR. WRIGHT: We had one account which used  
6 a considerable tonnage.

7 THE CHAIRMAN: From 1940 to 1958 you brought  
8 none in.

9 MR. WRIGHT: That is right.

10 THE CHAIRMAN: In 1958 you brought a test  
11 cargo.

12 MR. WRIGHT: Three test cargoes.

13 THE CHAIRMAN: Were they in large quantity?

14 MR. WRIGHT: I would say they would be about  
15 2500 tons a carload.

16 THE CHAIRMAN: And that was for testing for  
17 what purpose?

18 MR. WRIGHT: For industrial consumption.

19 THE CHAIRMAN: For steam ?

20 MR. WRIGHT: Yes.

21 THE CHAIRMAN: Not metallurgical purposes?

22 MR. WRIGHT: No.

23 THE CHAIRMAN: When did you make the test?

24 MR. WRIGHT: Mid-winter of 1958 and 1959. As  
25 a matter of fact, we are still running tests.

26 THE CHAIRMAN: You haven't brought any in since  
27 then?

28 MR. WRIGHT: Yes, we have brought in considerable,  
29  
30





1 but for Dominion Coal, for their own accounts. We  
2 have started them on our docks.

3 THE CHAIRMAN: They will dispose of it themselves.

4 MR. WRIGHT: Yes.

5 THE CHAIRMAN: But for your own purposes  
6 you really haven't renewed importation since 1940.

7 MR. WRIGHT: We have sold some direct cargoes;  
8 that is not to our own storage docks.

9 THE CHAIRMAN: I wasn't aware that any  
10 substantial shipments were made to Ontario points  
11 from the east. Does it show in the Dominion  
12 statistics?

13 MR. WRIGHT: It should, sir.

14 THE CHAIRMAN: Well, your objection is to  
15 the sizing of it?

16 MR. WRIGHT: That is true, and the analytical  
17 properties of it. If it has low fusion, high sulphur,  
18 it does have an effect on certain types of equipment.

19 THE CHAIRMAN: Which is more important?  
20 - the fusion level?

21 MR. WRIGHT: The fusion level.

22 THE CHAIRMAN: And that applied to all  
23 furnaces?

24 MR. WRIGHT: Practically.

25 MR. CHAIRMAN: Prior to 1958 what coal  
26 supplied those furnaces?

27 MR. WRIGHT: United States bituminous coal.

28 THE CHAIRMAN: Was there any particular  
29 purpose in making a test of Canadian coal?  
30





1 MR. WRIGHT: No, just trying to introduce  
2 the coal into this market.

3 THE CHAIRMAN: Has your market expanded  
4 over the Niagara Peninsula?

5 MR. WRIGHT: Yes.

6 THE CHAIRMAN: To Western Ontario?

7 MR. WRIGHT: Yes.

8 THE CHAIRMAN: In any substantial quantities?

9 MR. WRIGHT: Not of Nova Scotia coal, no,  
10 sir.

11 THE CHAIRMAN: That is what I mean.

12 MR. WRIGHT: Yes.

13 THE CHAIRMAN: It is minor in quantity.

14 MR. WRIGHT: That is true.

15 THE CHAIRMAN: Of course that coal would come  
16 under subvention in 1958, and if it had been suitable  
17 on the sizing would it have led to any further  
18 purchases?

19 MR. WRIGHT: I believe it would, yes.

20 THE CHAIRMAN: In quantity?

21 MR. WRIGHT: Fair quantity, yes.

22 THE CHAIRMAN: Where do you import from in the  
23 United States, then?

24 MR. WRIGHT: From Pennsylvania, West Virginia,  
25 Kentucky.

26 THE CHAIRMAN: Those three areas: Pennsylvania,  
27 West Virginia, Kentucky?

28 MR. WRIGHT: And Virginia.

29 THE CHAIRMAN: And Virginia as well. You bring  
30







1 a great deal of coal in?

2 MR. WRIGHT: Yes.

3 THE CHAIRMAN: How long have you been in  
4 business?

5 MR. WRIGHT: Our company?

6 THE CHAIRMAN: Yes.

7 MR. WRIGHT: I believe since 1907.

8 THE CHAIRMAN: Was that a subsidiary company?

9 MR. WRIGHT: Weaver Coal Company.

10 THE CHAIRMAN: A Canadian incorporation?

11 MR. WRIGHT: That is correct.

12 THE CHAIRMAN: Was it organized by the  
13 Canadian interest or American interest?

14 MR. WRIGHT: No, it was first organized  
15 by the American interests.

16 THE CHAIRMAN: I suppose that interest has  
17 remained?

18 MR. WRIGHT: No sir.

19 THE CHAIRMAN: Converted into a Canadian  
20 company?

21 MR. WRIGHT: Entirely Canadian.

22 THE CHAIRMAN: Then you are concerned solely  
23 with your own importation and then your own docks?

24 MR. WRIGHT: That is true.

25 THE CHAIRMAN: Have you offices in Montreal?

26 MR. WRIGHT: Yes, we have. It is our head  
27 office in Montreal.

28 THE CHAIRMAN: Do you distribute from Montreal?  
29  
30





1 MR. WRIGHT: Yes sir.

2 THE CHAIRMAN: You have facilities there  
3 to store?

4 MR. WRIGHT: Yes.

5 THE CHAIRMAN: Are they near the Dominion  
6 Coal Company dock?

7 MR. WRIGHT: Yes, they are, sir.

8 THE CHAIRMAN: How do you bring your coal from  
9 Montreal? By rail or water?

10 MR. WRIGHT: The United States coal?

11 THE CHAIRMAN: From the United States?

12 MR. WRIGHT: Yes, by rail and water. Rail up  
13 to Lake Ontario ports and then by water.

14 THE CHAIRMAN: Is there any by all rail?

15 MR. WRIGHT: There is some. Very little  
16 though.

17 THE CHAIRMAN: Very small quantity?

18 MR. WRIGHT: Very small.

19 THE CHAIRMAN: Then you bring it all up before  
20 the close of navigation?

21 MR. WRIGHT: We endeavour to, yes.

22 THE CHAIRMAN: You have fairly good stocks  
23 for the winter.

24 MR. WRIGHT: That is true.

25 THE CHAIRMAN: Do you distribute all along  
26 the St. Lawrence or is that done by local Montreal  
27 distributors?

28 MR. WRIGHT: That is all out of my jurisdiction  
29 down in Montreal.  
30







1 THE CHAIRMAN: I am just speaking generally.

2 MR. WRIGHT: Yes, they do.

3 THE CHAIRMAN: That is, you send it to other  
4 points say on the St. Lawrence?

5 MR. WRIGHT: A railroad car or truck, yes.

6 THE CHAIRMAN: To points further east of  
7 Montreal on the north shore?

8 MR. WRIGHT: Yes.

9 THE CHAIRMAN: So you bring substantial  
10 quantities to Montreal?

11 MR. WRIGHT: Yes, we do.

12 ~~THE~~ CHAIRMAN: Have you brought any Canadian  
13 coal to Montreal?

14 MR. WRIGHT: Nova Scotia coal?

15 THE CHAIRMAN: Yes.

16 MR. WRIGHT: Yes sir.

17 THE CHAIRMAN : In quantity?

18 MR. WRIGHT: Yes.

19 THE CHAIRMAN: How long have you been doing  
20 that?

21 MR. WRIGHT: That I couldn't answer.

22 THE CHAIRMAN: I mean you were familiar with  
23 the Canadian coal ?

24 MR. WRIGHT: We have been familiar with  
25 Canadian coals for years, yes sir.

26 THE CHAIRMAN: I suppose you knew the sizing  
27 which was generally given by the Dominion Company?

28 MR. WRIGHT: Yes.

29 THE CHAIRMAN: Then why did you have to have  
30





1 the particular experiment or test in Niagara Peninsula?

2 MR. WRIGHT: The sizing of these coals that  
3 we bring in from the United States are roughly inch  
4 and a quarter crushed mine run and when you put those  
5 over screens and screening you get perhaps inch and  
6 a quarter on zero coal will go through a quarter  
7 inch screen and come out about 25% waste. Nova  
8 Scotia coal, inch and a quarter on zero you will get  
9 65% through a quarter inch screen.

10 THE CHAIRMAN: You have that same experience  
11 in Montreal haven't you?

12 MR. WRIGHT: In Montreal they have built up  
13 a market. I believe that is where the sized coal  
14 is sold.

15 THE CHAIRMAN: They have developed a market  
16 for that?

17 MR. WRIGHT: Yes, and that is where I think  
18 practically their total tonnage practically goes.

19 THE CHAIRMAN: Why haven't you developed that  
20 west of - what is it you mentioned - Thorold?

21 MR. WRIGHT: Yes.

22 THE CHAIRMAN: Why hasn't that market been  
23 developed in that neighbourhood or in Ontario?

24 MR. WRIGHT: Mainly I would say because you  
25 have not been able to purchase any of their size of  
26 coal.

27 THE CHAIRMAN: You think such a market could be  
28 worked up?

29 MR. WRIGHT: I think it could. Dominion are  
30





1 selling coal, as you know, to Federal Government  
2 people throughout Ontario, and this size coal is  
3 going in there.

4 THE CHAIRMAN: Do you think you could develop  
5 a market around Niagara Peninsula with that amount  
6 of fines which they have been able to dispose of in  
7 the Montreal district?

8 MR. WRIGHT: Conceivably you could, yes.

9 THE CHAIRMAN: What would be necessary to do  
10 that?

11 MR. WRIGHT: You would have to have practically  
12 a double screened coal or coal that has a modification  
13 of probably only 15% quarter inch on zero.

14 THE CHAIRMAN: How are you able to sell it  
15 in Montreal and not in the Western or the lower part  
16 of Lake Ontario?

17 MR. WRIGHT: Well I would say mainly on account  
18 of the sizing of the coal.

19 THE CHAIRMAN: Exactly. What do they do in  
20 Montreal?

21 MR. WRIGHT: They have a screening plant there  
22 and can screen out these different sizes.

23 THE CHAIRMAN: You haven't that?

24 MR. WRIGHT: No.

25 THE CHAIRMAN: That is the answer I wanted.

26 MR. WRIGHT: There is, Dominion Coal Company  
27 have their screening plant in Montreal.

28 THE CHAIRMAN : You don't buy it from the  
29 Dominion Coal Company in Montreal, do you?  
30







1 MR. WRIGHT: We buy it from Dominion Coal  
2 Company. Where they ship that coal from - whether it  
3 is direct from Sydney or ship it to Montreal and  
4 trans-ship it in Montreal, I wouldn't know.

5 THE CHAIRMAN: If they shipped it from Sydney  
6 to Montreal to you is it properly screened?

7 MR. WRIGHT: Yes, because it will go through  
8 their plant in Montreal.

9 THE CHAIRMAN: No, but take a shipment direct  
10 to you from Sydney - do you bring coal in that way?

11 MR. WRIGHT: In to our own docks, no.

12 THE CHAIRMAN: That is what I am asking you.

13 MR. WRIGHT: On a direct cargo account it  
14 would go direct.

15 THE CHAIRMAN: Then you do bring direct  
16 shipments from Sydney?

17 MR. WRIGHT: Yes.

18 THE CHAIRMAN: Are those shipments properly  
19 screened?

20 MR. WRIGHT: No, they are going in the  
21 pulverizers, in the pulverizing units.

22 THE CHAIRMAN: Then you will pulverize it?

23 MR. WRIGHT: Yes.

24 THE CHAIRMAN: You have no market for that  
25 sale around Thorold?

26 MR. WRIGHT: Very little.

27 THE CHAIRMAN: I just wanted to see the  
28 difference between the Montreal market and your Thorold  
29 market and if it is that there is no demand for the  
30





1 pulverized in Thorold?

2 MR. WRIGHT: Very little.

3 THE CHAIRMAN: As there is in Montreal?

4 MR. WRIGHT: Or in the Province of Quebec.

5 THE CHAIRMAN: What do you think generally of  
6 the possibility of increasing the sale of Nova Scotia  
7 coal to Montreal or - in Ontario? You have been in  
8 the coal business for many years?

9 MR. WRIGHT: In Ontario, yes, but not in  
10 Montreal.

11 THE CHAIRMAN: Well you are familiar with  
12 the requirements of the market and the competition  
13 that it must face. Would you care to express an  
14 opinion about it?

15 MR. WRIGHT: Again I would say on certain  
16 types of equipment the coal could be used if it was  
17 properly sized.

18 THE CHAIRMAN: What do you mean by certain type  
19 of equipment?

20 MR. WRIGHT: Certain types of burning equipment;  
21 plants that do not require a high fusion coal.  
22 This is low fusion coal, as you know. Plants that do  
23 not have a sulphur requirement in their coal do  
24 want low sulphur.

25 THE CHAIRMAN: It must meet the price of  
26 American coal?

27 MR. WRIGHT: And it must meet the price of  
28 American coal, that is true.  
29  
30







1 THE CHAIRMAN: I suppose that is basic?

2 MR. WRIGHT: That is absolutely. A plant  
3 that works on a cost per thousand pound of steam  
4 is what they are interested in.

5 THE CHAIRMAN: I don't understand that  
6 sentiment has much place in the balance sheet of  
7 economics.

8 MR. WRIGHT: I don't believe it has.

9 MR. CLARKSON: I wonder, before we adjourn,  
10 if I might take leave to make a very brief addition  
11 to our statement this morning. It is to the effect  
12 that if in the opinion of the Commission any useful  
13 results could be obtained, the Province of Ontario  
14 is prepared to join with the coal producing Provinces  
15 of Canada in a committee to explore the possibility  
16 of increasing the market for Canadian coal in  
17 Ontario.

18 THE CHAIRMAN: That is what we are trying to  
19 find out now. If you have any further suggestions  
20 we would be very happy to receive them.

21 MR. CLARKSON: We were a little dubious about  
22 making the suggestion in view of the Commission's  
23 work, but as I say if in addition to the Commission's  
24 work you feel any useful purpose can be obtained,  
25 the Province is prepared to do that.

26 THE CHAIRMAN: Primarily we are looking for  
27 ideas. Now we welcome those from any quarter because  
28 there seems to be rather a dearth of ideas that will  
29





1 enable us to emerge from this unfortunate position.  
2 You haven't any to suggest to-day?

3 MR. CLARKSON: Not to-day, sir, no.

4 THE CHAIRMAN: Then we will adjourn until  
5 two-thirty this afternoon.

6  
7 ---The hearing adjourned until 2:30.  
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1 ---On resuming.

2 THE SECRETARY: Mr. Commissioner, Exhibit  
3 number 12 will be submitted by Mr. A.J.Smith on behalf  
4 of Canadian Coal Importers and Distributors.

5  
6 ---EXHIBIT No. 12: Brief of Canadian Coal  
7 Importers and Distributors.

8  
9 SUBMISSION OF CANADIAN COAL IMPORTERS  
10 AND DISTRIBUTORS

11  
12 APPEARANCES:

13 Mr. A.J.Smith, President.

14  
15 THE CHAIRMAN: Mr. Smith?

16 MR. SMITH: Mr. Commissioner and Gentlemen,  
17 as president of the Canadian Importers and Distributors  
18 for whom I have been requested to present this brief  
19 for your consideration, I wish to submit the following:

20  
21 The Canadian coal dock operators, importers and  
22 distributors of bituminous coal, whose names are listed  
23 below, are alarmed at the substantially increased  
24 level of subsidies on Nova Scotia coal, introduced  
25 by Order in Council PC 1958-520, effective for the fiscal  
26 year commencing April 1, 1958.

27 In essence the new Order in Council increases  
28 the maximum subsidy available on direct rail shipments  
29 from Nova Scotia mines into the Province of Quebec  
30







1 and Ontario by 80%, to a maximum of \$4.50 per ton.  
2 As was undoubtedly intended, this cannot help but  
3 result in a substantial increase in the volume of  
4 such direct rail shipments. This will, of course,  
5 work to the immediate detriment of the dock operators  
6 and importers who have traditionally supplied the  
7 consumers that are now to be taken over on a direct  
8 rail basis by the Nova Scotia mines.

9 In addition to this, the subsidy on waterborne  
10 coal to Montreal for transshipment to points in the  
11 Province of Ontario this year will amount to a full  
12 \$3.00 per ton (PC Order 1958-520, dated April 9, 1958)  
13 This compares with an average figure paid in the  
14 1956-57 period of \$2.19 to St. Lawrence River ports  
15 and approximately \$2.35 in the 1957-58 period. These  
16 comparisons refer to the movement up to the port  
17 of Montreal for transshipment of coal to the Province  
18 of Ontario. When the increase in rail subventions  
19 from Montreal to Ontario points is added of 50¢  
20 per ton (averaging \$1.75 to \$2.25), the total impact  
21 is very important and the rail freight reductions  
22 to various points in Ontario from Montreal bring the  
23 cost of movement to a very substantial figure indeed.

24 This special assistance given to the  
25 movement of Nova Scotia coal into the Province of  
26 Ontario will create substantial hardship to many coal  
27 dock operators and importers of bituminous coal in the  
28 Province of Ontario to whom no such assistance is  
29 being extended by your Government.  
30





1 Surely inadequate recognition has been given  
2 to the importance of the eighty-five commercial coal  
3 dock facilities located along the St. Lawrence River  
4 and the Canadian shores of the Great Lakes, which, over  
5 the past forty years, have played such a vital role in  
6 the industrial development of central Canada and which,  
7 during the last war for example, successfully handled  
8 the fuel supply problems brought about by the diversion  
9 of oil and gas to special purpose uses by government  
10 order, at a time when very little Nova Scotia coal was  
11 even available for industry in the Province of  
12 Ontario. Already this vital network of Canadian  
13 coal docks has been threatened by the proposed  
14 temporary conversion of industrial plants to gas,  
15 during the period while the distributors for Trans-  
16 Canada Gas Pipeline Company are endeavouring to build  
17 up an adequate domestic and special purpose load.  
18 The increased subsidy now instituted on Nova Scotia  
19 coal appears to be a further and perhaps final blow  
20 which may eliminate many of the Canadian coal docks  
21 remaining throughout Ontario.

22  
23 These commercial docks are necessary to the  
24 Canadian economy. It is not generally realized, even  
25 by substantial coal consumers, how precarious is the  
26 continued operation of these coal distribution points.  
27 It will not be until the docks are finally forced out  
28 of business that the full import of present  
29 governmental actions will be recognized. At that time  
30 local industries will be left without convenient







1 dock storage on which they may rely for storage  
2 of their coal and security of supply when direct  
3 rail shipments from the mines are delayed. Industries  
4 now relying on truck delivery will be forced to secure  
5 rail facilities (which, in certain instances, will  
6 even involve plant relocation). Unless all coal  
7 movements (both U.S. and Canadian) are then substantially  
8 subsidized, fuel costs to industry in Ontario will  
9 be drastically increased through the elimination  
10 of low cost lake movement of U.S. bituminous coal and  
11 our national competitive position in world markets  
12 will thus be impaired.

13         These things can and will happen if a proper  
14 long-term policy is not pursued. Canadian coal  
15 docks are dependent upon the maintenance of an  
16 adequate volume to permit the handling of coal  
17 over the docks at minimum unit costs and the limited  
18 Canadian consumption is, at the present time, barely  
19 sufficient to justify maintenance of existing dock  
20 facilities. This is aptly illustrated by the closing  
21 of the docks at Depot Harbour and Britt over the  
22 past few years. Any further loss of volume will  
23 inevitably and quickly result in the closing of more  
24 Canadian coal docks.

25         The Canadian dock operators, Canadian importers  
26 and distributors listed below ask no favours but are  
27 prepared to stand on their record of long service to  
28 industry and to the community and to compete, on an  
29 equal basis, for their share of the Canadian energy  
30





1 market. Conversely, we must strongly protest the  
2 subsidization by government of one section of  
3 Canadian private enterprise to the direct detriment  
4 of another section of Canadian private enterprise.

5 It is recognized that the coal mining industry  
6 in the Canadian Maritime Provinces has been handicapped,  
7 to some extent, all through its history by the lack of  
8 local industrial markets for its product. For this  
9 reason, it is perhaps not indefensible that,  
10 pending a more permanent and realistic solution,  
11 government subsidy should be made available to  
12 permit the continued operation of an industry on  
13 which many of our fellow citizens are dependent for  
14 their livelihood. This was particularly true when,  
15 as was originally the case, these subsidies were  
16 established on the basis necessary to permit the  
17 achievement of the same relative level of operation  
18 at these mines as was being attained by the rest  
19 of the Canadian economy.

20 It is respectfully suggested, however, that  
21 there may be some reasonable doubt of the propriety of  
22 the substantial increase now effected in the level  
23 of subsidy. This subsidy is provided by the  
24 Canadian taxpayers almost entirely for the benefit of  
25 a single company. This company, throughout the  
26 past winter, has operated at a higher level of  
27 production than the rest of the Canadian economy. In  
28 addition, according to the annual report recently  
29 released by its parent company, the latter achieved  
30







1 a "record profit" of \$7,112,996 from its operations  
2 over the latest fiscal year. As you can appreciate,  
3 our companies as industrial taxpayers who are  
4 actually contributing to this subsidy, cannot help  
5 but feel a strong resentment. We see a further  
6 addition being made to government expenditures, for  
7 the ultimate benefit of a company that is already  
8 achieving record-profits, at a time when our  
9 individual members are finding their own profits  
10 steadily and substantially reduced - at the probable  
11 ultimate cost of the complete destruction of a  
12 major portion of our Canadian coal dock and coal  
13 importing industry.

14 All this is in addition to the preference which  
15 has already been shown on government purchases  
16 where Canadian coal is purchased as long as its  
17 cost is not more than 20% greater than the cost of  
18 U.S. coal.

19 To illustrate the impact of these increased  
20 subventions and price allowances, on one government  
21 installation in Ontario, using 13,000 tons of coal,  
22 where United States coal is available at \$10.30 per  
23 ton, the 20% preference permitted for Nova Scotia  
24 coal amounts to \$26,000.00. Loss of duty revenue  
25 on the U.S. coal at 50¢ per ton represents a  
26 further \$6,500.00. If the full subsidy of \$5.25  
27 per ton available is used, the further government  
28 expenditure would be \$68,250.00 for a grand total of  
29 \$100,750.00 extra cost to the taxpayer to provide  
30







1 a market for 13,000 tons of Nova Scotia coal. Where  
2 freight rate reductions are used the ultimate effect  
3 on the taxpayer is the same.  
4

5 It would appear that Order in Council  
6 PC 1958-749 "Nova Scotia-Ontario Special Coal  
7 Assistance Order, dated May 29, 1958", was issued  
8 for the specific purpose of providing a market for a  
9 maximum of 100,000 tons of Nova Scotia coal in  
10 an area previously served from U.S. mines. If this  
11 objective is achieved at the maximum level of  
12 assistance authorized, the resulting cost to the  
13 taxpayer is as follows:

14 Financial Assistance Available	
\$5.80 per ton	\$580,000.00
15 Loss of Import Duty on U.S. coal	
.50 per ton	50,000.00
16	<hr/>
17 Total	\$630,000.00
18	

19 We would appreciate having an opportunity  
20 to discuss this situation further with you at your  
21 earliest convenience. The problem is critical and  
22 we trust that you will recognize the importance of  
23 an early and equitable solution.  
24

25 Signed on behalf of Canadian coal  
26 importers and distributors:

27 C.L. Amos Coal Co. (Canada) Limited,  
28 809 Sun Life Building,  
29 Montreal, Canada.

30 Canada Coal Company Limited,  
Sterling Tower,  
Toronto, Ontario.





1 Century Coal Company Limited,  
2 Foot of Yonge Street,  
3 Toronto, Ontario.

4 W.H.Cox Company Limited,  
5 Canadian Pacific Building,  
6 Toronto, Ontario.

7 Dalton Fuels Limited,  
8 19 York Street,  
9 London, Ontario.

10 The Elias Rogers Company, Limited,  
11 2221 Yonge Street,  
12 Toronto 7, Ontario.

13 Empire-Hanna Division,  
14 The M.A.Hanna Company,  
15 Canadian Pacific Building,  
16 Toronto, Ontario.

17 Herbert Fuels Limited,  
18 Cobalt, Ontario,

19 The Lake Erie Coal Company Limited,  
20 Walkerville, Ontario.

21 Lander Coal Company Limited,  
22 Oshawa, Ontario,

23 Lyons, Fuel, Hardware & Supplies Limited,  
24 494 Dundas Street,  
25 Sault Ste. Marie, Ontario,

26 A.T.Massey Coal Company, Limited,  
27 696 Yonge Street,  
28 Toronto, Ontario.

29 McLaughlin Coal and Supplies Limited,  
30 110 King Street,  
Oshawa, Ontario.

The Milnes Coal Company Limited,  
1815 Yonge Street,  
Toronto, Ontario.

James Murphy Coal Company,  
112 Simpson Street,  
Fort William, Ontario.

Myers Coal Company Limited,  
70 Brant Street,  
Hamilton, Ontario.







1 Napanee Fuel & Supply Company,  
2 Napanee, Ontario.

3 W.B.Reynolds Coal Company Limited,  
4 Brockville, Ontario.

5 Rochester & Pittsburgh Coal Co. (Canada ) Ltd.,  
6 55 York Street,  
7 Toronto, Ontario.

8 The Valley Camp Coal Co. of Canada Limited,  
9 220 Bay Street,  
10 Toronto, Ontario.

11 Mr. Chairman, since this brief was originally  
12 drawn up in 1958, there have been some further  
13 developments, and I would ask your permission  
14 at this time if I could make some additional comments.

15 THE CHAIRMAN: Yes.

16 MR. SMITH: Throughout our Brief we have  
17 pointed out what we feel are the unfair aspects of the  
18 situation. Basically, we feel the Maritime coal  
19 industry has no quarrel with companies representing  
20 American coal.

21 Instead, as outlined in the 1959 Financial  
22 Report of Dominion Steel and Coal Corporation, their  
23 problems can be mainly attributed to the substantial  
24 increase in the import of low priced foreign oil,  
25 and to some extent natural gas. Here is a portion of  
26 the 1959 Dosco Report to shareholders.

27 "The market for coal has steadily deteriorated  
28 during the past two years, largely due to the  
29  
30





1 competition from natural gas, fuel oil and hydro  
2 power. In the early stages, your Directors felt that  
3 the situation might be of a temporary nature and that  
4 with suitable government assistance, sales might be  
5 maintained at past levels and, consequently, the  
6 mines continued to operate at normal production, thus  
7 providing continuing employment to the miners. However,  
8 the sales situation did not improve and very large  
9 stockpiles of coal were built up, aggregating over  
10 1,200,000 tons by the spring of 1958. It, therefore,  
11 became necessary to place the mines on short time  
12 in June, 1958, and this continued throughout the  
13 year ending July 31, 1959. By restricting production  
14 in this manner, it has been possible to reduce  
15 coal stockpiles gradually so that at July 31, 1959,  
16 stockpiles had been reduced to 760,000 net tons, a  
17 reduction of approximately 550,000 net tons from  
18 the same date in the preceding year.

20 The prospect of future improvement in sales  
21 is doubtful, particularly in view of the efforts  
22 being made to expand the utilization of natural gas  
23 in Ontario and Quebec."

24 A few years ago, about 12 large industrial  
25 plants in the Province of Quebec consumed well over  
26 one million tons of Nova Scotia coal. There were,  
27 of course, many smaller industries using Maritime  
28 coal, but let us follow the history of these major  
29 industries. Several years ago, United States coal  
30







1 was supplied, but subsidies on Maritime coal were  
2 increased, and we were forced out of the picture.  
3 Nova Scotia coal held the market for a few short  
4 years, then foreign oil took over, and today all of  
5 these industries are burning oil.

6 It was just reported in the February 13th issue  
7 of the Financial Post that the second largest coal  
8 consumer in the Province of New Brunswick, Bathurst  
9 Power and Paper Company, has indicated they will  
10 switch to oil this year. Then, a few months ago,  
11 it was reported in the Financial Post that a  
12 proposed Thermal Electric plant near Saint John will  
13 use foreign oil, and not Maritime coal. This is hard  
14 for us to understand, since Dominion Coal Company  
15 have indicated they are willing and able to supply  
16 large quantities of Nova Scotia coal to Ontario  
17 Hydro at the Toronto Thermal Electric Plant, and  
18 where, to compete with American coal, they will require  
19 substantial subsidy. It would seem logical to  
20 us that a much smaller subsidy would be required  
21 in order to make Maritime coal competitive within  
22 the Maritime Provinces.

23 Our industry indeed realizes many of the  
24 problems which must be faced in order to work out a  
25 solution to the Maritime coal situation. However,  
26 why is the subsidy directed only against American  
27 coal? Why not also make the subsidy available where  
28 and when Nova Scotia coal is competing with foreign  
29 oil? What is so special about foreign oil that it  
30







1 should be free of competition with subsidized Canadian  
2 coal? Both foreign oil and American coal are  
3 imported by Canadian companies which give employment  
4 to thousands of Canadian citizens. If it is found  
5 advisable to subsidize a Canadian fuel to compete with  
6 foreign fuels, why should not this subsidy apply  
7 equally to all?

8  
9 May we respectfully suggest that if  
10 legislation is passed providing subsidies which will  
11 allow Dominion Coal Company to compete with foreign  
12 oil or natural gas in the area east of Montreal,  
13 that the precarious market conditions which are  
14 prevalent now, will soon improve substantially  
15 and we believe satisfactorily, with much lower cost  
16 to the Canadian taxpayer.

17 THE SECRETARY: Mr. Commissioner, I would like  
18 to put on record that Mr. Smith's additional  
19 information will be recorded as Exhibit number 13.

20  
21 ---EXHIBIT No. 13: Additional Brief on behalf  
22 of Canadian Importers and  
23 Distributors.

24 THE CHAIRMAN: Mr. Gunn?

25 MR. GUNN: Mr. Smith, dealing with Exhibit  
26 12, the original brief that you read, on page 4  
27 it shows the names of the Canadian Coal Importers  
28 and Distributors who signed on behalf of Exhibit  
29 12. The names that are listed there, do they sell  
30





1 Canadian coal?

2 MR. SMITH: It is quite possible some of  
3 them do, sir. I am not familiar with the  
4 distributors, you will appreciate, of all the  
5 members. They come from one end of Ontario to  
6 the other. But I would think it is quite possible  
7 that they have handled some Nova Scotia coal. The  
8 way it may be handled and the way it is involved  
9 is that it is possible they may have been asked  
10 to deliver to a Government installation. I don't  
11 think they are buying it because the Dominion Coal  
12 Company have been selling their own coal in the  
13 Province of Ontario.  
14

15 MR. GUNN: Could you find out for us what  
16 ones who have signed on page 4 do sell Canadian coal  
17 and, if so, how much? Could you do that, please?

18 MR. SMITH: Yes, sir. Would it be all  
19 right if I changed that a little bit to say sell  
20 or handle?

21 MR. GUNN: Sell or handle, yes.

22 MR. SMITH: Yes, sir.

23 MR. GUNN: And the amounts, please.

24 MR. SMITH: Yes.

25 MR. GUNN: I suppose your personal  
26 knowledge is to the effect that the bulk of them  
27 more or less concentrate on the handling and  
28 distribution of American coal.

29 MR. SMITH: Yes; it has. The Dominion  
30







1 Coal Company sell their own coal in the Province  
2 of Ontario, and they may be asked to deliver to a  
3 Government installation or something like that.

4 MR. GUNN: On page 1 of Exhibit 12 I quote:

5 "This special assistance " -- that is dealing  
6 with subventions -

7 "-given to the Movement of Nova Scotia coal  
8 into the Province of Ontario will create  
9 substantial hardships to many coal dock  
10 operators and importers of bituminous coal  
11 in the Province of Ontario to whom no such  
12 assistance is being extended by your  
13 government."

14 Would you enlarge on that, please, Mr. Smith?

15 MR. SMITH: Yes, I can. I believe the best  
16 examples would be the Department of Defence  
17 installations; say, for example, Camp Borden,  
18 Centralia, various army units in London, where  
19 formerly that coal was placed over a dock under the  
20 subventions that were set up which was in the position  
21 to take it from Sydney and deliver it to the station  
22 which, consequently, increased the tonnage, otherwise  
23 it would go by one of the neighbouring docks.

24 MR. GUNN: Then on page two you mention, about  
25 the middle of the page:

26 "These things can and will happen if a  
27 proper long-term policy is not pursued."

28 This is dealing with concerns going out of  
29 business. Would you mind elaborating on what you mean  
30





1 by "a proper long-term policy"?

2 MR. SMITH: Well, we mean by that - we have  
3 no idea at the moment how long subventions are going  
4 to be continued on Nova Scotia coal. Perhaps they  
5 will be forever. If the policy is extended to  
6 such an extent that Nova Scotia coal will become  
7 competitive with American coal of the same quality,  
8 fusion temperature, ash and sulphur, and so forth,  
9 it will be very easy to contemplate a major coal  
10 company coming in and operating a coal dock in Toronto.  
11 If they did that it would be very easy for them to  
12 take over and it wouldn't be too long before they  
13 would have the major portion of the business in  
14 Toronto, or any other city, and other operators  
15 would be forced out of business before very long.

16 MR. GUNN: Do you think that if the Dominion  
17 Coal Company operated a dock in the Toronto area  
18 it would put the others out of business?

19 MR. SMITH: I think with the government behind  
20 them that would be so.

21 MR. GUNN: How many are in the Toronto area,  
22 docks?

23 MR. SMITH: I think there may be eight in total.  
24 I am not exactly sure of that. Some of them are  
25 fairly small, others are fairly large.

26 MR. GUNN: Then, on page 3, that is of  
27 Exhibit 12, you say: "It is respectfully suggested,  
28 however, that there may be some reasonable  
29 doubt of the propriety of the substantial  
30





1 increase now effected in the level of subsidy.  
2 This subsidy is provided by the Canadian  
3 taxpayer almost entirely for the benefit  
4 of a single company. This company, through-  
5 out the past winter, has operated at a higher  
6 level of production than the rest of the  
7 Canadian economy. In addition, according to  
8 the Annual report recently released by its  
9 parent company, the latter achieved a  
10 'record profit' of \$7,112,996 from its  
11 operations over the latest fiscal year."

12 Do you say that applies to the coal company?

13 MR. SMITH: No, that is the Dominion Steel  
14 and Coal, the entire corporation.

15 MR. GUNN: What about the coal company itself?

16 MR. SMITH: The coal company shows a loss.

17 MR. GUNN: Of how much?

18 MR. SMITH: According to this year's financial  
19 report - I think it includes about a million dollars  
20 from last year, and there is another million dollar  
21 loss this year. I think there is something in the  
22 neighbourhood of two million dollars on coal.

23 MR. GUNN: Are you in a position to give  
24 us the information to-day as to what percentage of  
25 your members' coal business is destined to small  
26 communities or not?

27 MR. SMITH: No, it would be rather difficult  
28 to say. You can tell from the companies, the towns  
29 in which they are located, that it does cover a  
30







1 pretty large cross-section of all towns, say, located  
2 within forty miles of the Great Lakes system, bearing  
3 in mind, for example, some of these companies have  
4 many docks. I would say that every community within  
5 sixty miles of the Great Lakes system is covered from  
6 those docks.

7 MR. GUNN: "Would you know what percentage  
8 that coal forms of the total business of your  
9 member companies? Could you answer that?

10 MR. SMITH: How much tonnage these people  
11 would sell?

12 MR. GUNN: Yes.

13 MR. SMITH: No, sir. - I, of course, don't have  
14 access to the tonnages sold by many of those companies.  
15 Most of them are competing companies, and, I would  
16 say, it would be very difficult to get that information  
17 unless you requested it singly from each company.

18 MR. GUNN: That is all for the moment, Mr.  
19 Chairman, until I have a chance of reading this  
20 second brief.

21 THE CHAIRMAN: Mr. Smith, you spoke on page 1  
22 about the facilities, the dock facilities that exist  
23 along the Great Lakes and the St. Lawrence. Have you  
24 any idea of the amount of investment that they would  
25 reasonably represent?

26 MR. SMITH: No. I recall you asked Mr.  
27 Culham that this morning. It is a very difficult  
28 figure to give. For example, on our dock which we  
29 operate at the Lakehead, we have a very high  
30





1 investment in that only boats go up there. We have  
2 a very substantial investment in our docks at the  
3 Lakehead, which is caused by the fact that coal  
4 moves up there in bulk boats, therefore we have to  
5 have overhead bridges to unload these boats.  
6 They are extremely expensive, and there are the  
7 rails and all the things that go along with it.

8 THE CHAIRMAN: Those are major installations?

9 MR. SMITH: Yes, sir, that is right.

10 Whereas down in Toronto, for example, where coal  
11 comes in on unloading vessels, the investment here  
12 consists of trains, loading equipment, trucks, screens,  
13 that type of thing, and it is a much smaller  
14 investment.

15 THE CHAIRMAN: Would that characterise  
16 most of these docks?

17 MR. SMITH: I would say so, yes.

18 THE CHAIRMAN: Have you any others on a large  
19 scale in Fort William?

20 MR. SMITH: Yes. The Canadian Pacific  
21 Railway operates a dock at Fort William as well.

22 THE CHAIRMAN: It was originally for whole  
23 coal?

24 MR. SMITH: Yes.

25 THE CHAIRMAN: Now they are used for  
26 commercial.

27 MR. SMITH: Yes. The C.P.R. will handle  
28 coal for other companies up there. Our own docks  
29 lease.  
30







1 THE CHAIRMAN: You have described what,  
2 generally, the docks consist of, what their facilities  
3 consist of, and they are more or less limited to  
4 self-unloading vessels?

5 MR. SMITH: Yes. I would say from about  
6 Goderich down to the eastern - well, Owen Sound.  
7 When it gets to Midland and Lake Superior it is  
8 all bulk boats.

9 THE CHAIRMAN: Take one of the ordinary  
10 docks in the lake area. Just describe in some  
11 detail what it consists of, what it has to  
12 represent in capital investment.

13 MR. SMITH: Well you take a dock in Toronto  
14 as being typical, first of all the property has to  
15 be leased from the Harbour Commission. It has to  
16 be improved. On our dock we have macadam or asphalt  
17 surface on them, which we must do when you are  
18 supplying coal to your commercial buildings or  
19 apartments to ensure clean quality. You don't want  
20 stones or mud or anything like that. You have to  
21 spend a considerable amount of money preparing the  
22 dock surface.

23  
24 Then of course with the quantity of coal  
25 it is not possible to get a dock large enough that  
26 you can just bring self-unloader vessels up and  
27 put all your coal on the front of the dock. With  
28 the volume that is handled, it has to be transported  
29 back. The self-unloader will come in here, put the  
30 coal here but you will have to move it back to other





1 parts of your dock.

2 THE CHAIRMAN: You have to handle it the  
3 second time?

4 MR. SMITH: Yes. It can be done by conveyor  
5 belts or trucking or any other system which the  
6 company wants to use.

7 THE CHAIRMAN: "Is that generally the case with  
8 the docks ?

9 MR. SMITH: Yes sir. At that point you must  
10 have cranes or any similar type of loading  
11 equipment which will load trucks; also be flexible  
12 enough to load railway cars.

13 THE CHAIRMAN: You move it back also with  
14 cranes, do you?

15 MR. SMITH: It could be cranes or trucks.

16 THE CHAIRMAN: Or trucks?

17 MR. SMITH: Or conveyor belts. Then it is  
18 necessary to have a substantial fleet of trucks due  
19 to the volume, for example, in the City of Toronto,  
20 the number of accounts, and then scales and so forth.

21 THE CHAIRMAN: Well I suppose in the event  
22 that Nova Scotia coal came up those docks would be  
23 as available for that coal as they are for American  
24 coal?

25 MR. SMITH: Yes sir. I don't think any  
26 companies have any objection to handling Nova Scotia  
27 coal. So far we have never been able to buy any  
28 Nova Scotia coal.

29 THE CHAIRMAN: Why not?  
30





1 MR. SMITH: Well I suppose you could buy it  
2 at a price. I am speaking of our own company.

3 THE CHAIRMAN: You mean economically you  
4 couldn't buy it?

5 MR. SMITH: I am speaking of my own company.  
6 Except where we wanted to buy some Nova Scotia coal  
7 for government order by tender, and we were told we  
8 could buy it at the same price as the Dominion Coal  
9 were going to submit their tender which is entirely  
10 pointless of course.

11 THE CHAIRMAN: You were told what?

12 MR. SMITH: We would be able to buy their  
13 coal at the same price as Dominion Coal were going to  
14 submit in their tender. This leaves no room for  
15 profit and is pointless.

16 THE CHAIRMAN: How many men are involved in  
17 this dock handling, transporting coal from the docks?  
18 Just approximately?

19 MR. SMITH: It is rather difficult -- for  
20 example, there are two hundred in our own company  
21 and I suppose of the member companies listed here  
22 there probably is well over a thousand. I mean  
23 you have to take into account things that I can not  
24 take time to be able to even suggest. For example,  
25 a dealer in Brockville how many truck drivers he has  
26 that are associated with the business. There are  
27 I would think in the entire coal industry in Ontario  
28 certainly a very substantial number of people involved.  
29

30 THE CHAIRMAN: How long have you been in the







1 business?

2 MR. SMITH: Since 1945.

3 THE CHAIRMAN: What is the general age of  
4 these docks along the lake front?

5 MR. SMITH: Well our first dock was built,  
6 I believe, in 1909 at the Lakehead. Our second dock  
7 was about 1919 in Port Colborne, and from there we  
8 had developed other docks that are more recent.

9 THE CHAIRMAN: The Dominion Coal has no docks  
10 in Ontario, has it? Has it docks in Toronto?

11 MR. SMITH: Not that I know of, sir. I believe  
12 they handle their coal over other companies' docks.

13 THE CHAIRMAN: Do they have any agencies to  
14 which they limit the supply of coal?

15 MR. SMITH: I wouldn't like to comment on  
16 that, sir. I would rather you asked Dominion Coal  
17 Company.

18 THE CHAIRMAN: Take these companies, these  
19 associations on whose behalf you appear. Are they  
20 in any way associated with particular mines in the  
21 United States or do they take coal from any mine?

22 MR. SMITH: A few of them will have connections  
23 with perhaps four or five mines and the balance of  
24 their coal is bought on the open market from any  
25 number of mines.

26 THE CHAIRMAN: I suppose the destination of  
27 the coal will have something to do with the particular  
28 dock that is used?

29 MR. SMITH: Yes sir, there is, and combining  
30





1 freight rates and vessel rates and also the burning  
2 characteristics of the coal, and the chemical  
3 characteristics. For example, a purchaser in Toronto  
4 probably has at his fingertips the largest selection  
5 of coal in North America in the coal coming into  
6 Toronto from every coal producing state I guess east  
7 of the Mississippi which is something that I don't  
8 believe occurs for example in Detroit or Buffalo  
9 or something like that. All are more restricted.

10 In Toronto, you can buy coal from almost  
11 anywhere and there are many different kinds stocked  
12 on all the docks.

13 THE CHAIRMAN: Take Centralia. How does  
14 the coal for that station reach there?

15 MR. SMITH: Formerly sir, it was handled  
16 either over the dock at Port Stanley or their own  
17 dock at Port Burwell and delivered by truck.

18 THE CHAIRMAN: So far as the Nova Scotia  
19 coal goes, that is the distance of Centralia, it  
20 must use one of those two docks?

21 MR. SMITH: No sir, it goes in by rail car  
22 and is unloaded by a truck.

23 THE CHAIRMAN: That is the alternative?

24 MR. SMITH: That is the way it has been  
25 going in sir. You see, Centralia requires  
26 according to their specifications a size coal which  
27 I believe is supposed to be a quarter inch on two  
28 inches. So far as I know Dominion Coal have not been  
29 shipping any of that sized coal by boat going into  
30







1 Ontario. I believe it has all been slack coal.

2 THE CHAIRMAN: Is that a practice to ship  
3 sized coal by rail rather than vessel?

4 MR. SMITH: No sir. We bring in a great  
5 deal of sized coal to our docks. You must get  
6 that from a mine which is large enough that it can  
7 load large boats. For example, with the soft  
8 structure of Nova Scotia coal and the amount of  
9 fines they get in mining, I imagine it would present  
10 a fair problem, for example, to load a 14 thousand ton  
11 boat with double screened coal. Now many of our  
12 mines in the States that are producing very large  
13 quantities, they have a harder structure fuel which  
14 doesn't present the same difficulty, and there we  
15 bring a great deal of double screened coal in boats.

16 THE CHAIRMAN: Do you think considerable  
17 quantity of fines is produced in the shipment, in  
18 the handling?

19 MR. SMITH: Yes sir, there is certainly  
20 some breakage but it isn't enough to spoil the  
21 quality of the coal.

22 THE CHAIRMAN: Well what about Nova Scotia  
23 coal. Is that more marked in those fines as a result  
24 of handling and shipping?

25 MR. SMITH: Yes sir. It is a softer structure  
26 coal.

27 THE CHAIRMAN: And you find that it does hold  
28 more fines which you think result from the course  
29 of the shipment, the handling and the docking?  
30





1 MR. SMITH: We don't have any personal  
2 experience of that sir. I am just mentioning what  
3 other people have told me that have handled Nova  
4 Scotia coal.

5 THE CHAIRMAN: That is their view?

6 MR. SMITH: Yes sir.

7 THE CHAIRMAN: "I suppose you are interested  
8 largely today in industry in Ontario?

9 MR. SMITH: Yes, we are interested in  
10 industry and in commercial buildings; not so much  
11 interested in the domestic business as a great deal  
12 of that has already gone to oil and gas.

13 THE CHAIRMAN: I am going to put a question  
14 to you which is an old question, but you may have  
15 some fresh ideas on it. I won't say this is going  
16 to happen but it might happen that the coal man  
17 in Nova Scotia says that he has shipped or trying to  
18 ship to a market the industrial products of which  
19 are highly protected by tariffs and that there is no  
20 difference between a tariff to benefit an industrial  
21 product and a subsidy to help along the Provincial  
22 resources. What do you say to that?

23 MR. SMITH: Well I think I would like to be  
24 an economist of some sort to try and answer that sir,  
25 which I am not. I think it is something to argue  
26 about for a long time.

27 THE CHAIRMAN: Well if you can't enlighten us  
28 on that ----  
29

30 MR. SMITH: I think if I could I would probably





1 have a different job sir.

2 THE CHAIRMAN: Thank you, Mr. Smith.

3 MR. ELLIS: I would like to call upon Mr.  
4 W.C. Cunningham who will submit a brief on behalf  
5 of the Hydro Electric Power Commission of Ontario  
6 and this brief becomes Exhibit number 14 in the  
7 records of the Commission.  
8

9 ---EXHIBIT No. 14: Brief on behalf of the Hydro  
10 Electric Power Commission  
11 of Ontario.  
12  
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STATEMENT TO THE ROYAL COMMISSION ON COAL (1959)  
BY THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

This statement and its attachments, copies of which have been distributed to the Commission, outlines in some detail Ontario Hydro's position on the following points:

Table I - Coal consumed by Ontario Hydro for thermal electric generation 1949 to 1959.

Table II - Forecast of our coal requirements for thermal generation for the years 1960 to 1980; under two alternatives.

(a) If no nuclear plant is developed beyond N.P.D. (Nuclear Power Demonstration - 20 MW) scheduled for service in 1961 and CANDU No.1 (200 MW) scheduled for service in late 1964 or early 1965.

(b) If a high rate of nuclear development is assumed in minimum stages of 200 MW units.

Table III - Forecast of loads and resources 1960 to 1980 - all systems.

The coal which we have consumed in our thermal electric stations as shown in Table I has been purchased in highly competitive markets from adjacent U.S. coal fields and floated to our docks at Toronto and Windsor by self unloader vessel, the only exception to this being a test burn of 10,000 tons of Nova Scotia coal which was arranged in co-operation with the Dominion Steel and Coal Corporation through their subsidiary, Dominion Coal Company Limited, for consumption in our 100MW units at the Richard I.





1 Hearn Generating Station. These tests were completed  
2 and reported on early in 1959 and in this connection  
3 I have extracted from this report the conclusions  
4 drawn which are set forth in Appendix 1 attached.

5 The forecasted coal requirements as shown  
6 on Table II will be purchased as in the past in  
7 accordance with our normal policy at best value,  
8 unloaded on dock at our various stations throughout  
9 Ontario. Insofar as the immediate future is  
10 concerned our coal inventories are sufficient to meet  
11 the forecasts of consumption in 1960.

12 I would draw your attention specifically to  
13 Table II wherein you will note that we have  
14 predicated coal forecasts on two alternatives which,  
15 of course, are dependent on the competitive  
16 availability, or otherwise, of nuclear energy or  
17 other fuels. It will be appreciated that this table  
18 represents the maximum-minimum picture with column B  
19 setting out our forecast of the minimum probable  
20 coal requirements. Development to date, however,  
21 in the nuclear field gives good promise of nuclear  
22 power being a competitive source of electric  
23 power in the late 1960's. This fact is even more  
24 significant in terms of the Ontario economy if we  
25 are able to divert a substantial portion of the  
26 many millions of dollars of our future fuel costs  
27 to uranium which is produced in Ontario.

28 Our engineers in considering nuclear plants  
29 have done so on the basis that 200 MW units will be  
30







1 economical at 80% annual capacity factor from 1967  
2 onward in the southern part of the Province. In the  
3 Northwestern Division it is assumed that nuclear  
4 units will not be installed before 1974 when it is  
5 expected that development in that area will be large  
6 enough to absorb 200 MW unit sizes.

7  
8 I trust the tabling of this information will  
9 be of assistance to the Commission in its future  
10 deliberations.

11 February 15, 1960.

12 TABLE I

13 COAL USAGE BY ONTARIO HYDRO'S THERMAL STATIONS

14 <u>Year</u>	15 <u>Tons of Coal</u>
16 1949	6,130
17 1950	53,984
18 1951	63,447
19 1952	210,138
20 1953	848,705
21 1954	481,206
22 1955	213,956
23 1956	469,350
24 1957	722,275
25 1958	316,561
26 1959	214,000
27	preliminary
28	subject to correct-
29	ion.
30	





TABLE II

FORECAST COAL REQUIREMENTS

	<u>A</u>	<u>B</u>
	If no nuclear plant is developed beyond NPD and CANDU No. 1	If a high rate of nuclear development is assumed.
1960	135,000 "	135,000
1961	456,000	456,000
1962	1,100,000	1,100,000
1963	1,879,000	1,879,000
1964	2,693,000	2,693,000
1965	3,238,000	3,238,000
1966	3,533,000	3,533,000
1967	4,342,000	4,204,000
1968	5,287,000	4,452,000
1969	6,379,000	4,335,000
1970	7,673,000	4,489,000
1971	9,632,000	5,072,000
1972	11,154,000	5,022,000
1973	12,730,000	4,901,000
1974	14,316,000	5,058,000
1975	15,893,000	4,685,000
1976	17,907,000	5,143,000
1977	20,050,000	5,218,000
1978	22,051,000	6,050,000
1979	24,062,000	6,255,000
1980	26,489,000	7,099,000
1981	28,869,000	7,272,000





TABLE III

FORECAST OF LOADS AND RESOURCES (1960 - 1980)  
DEPENDABLE PEAK CAPACITY (DECEMBER)

(All Systems)

Peak Load December	Total Resources	Hydro- Electric	Thermal- electric Conventional Nuclear	Power Purch- ased.
--------------------------	--------------------	--------------------	---	--------------------------

Thousands of Kilowatts

1960	5,918	6,929	4,934	1,374	-	621
1961	6,313	7,135	4,762	1,749	18	606
1962	6,732	7,417	4,762	2,031	18	606
1963	7,160	7,954	5,016	2,313	18	607
1964	7,627	8,588	5,086	2,877	18	607
1965	8,059	9,073	5,196	3,252	* 18	607
1966	8,516	9,674	5,327	3,722	18	607
1967	9,001	10,207	5,367	3,815	*418	607
1968	9,514	10,644	5,404	3,815	818	607
1969	10,057	11,212	5,479	3,908	1,218	607
1970	10,644	11,780	5,509	4,378	1,618	275
1971	11,303	12,419	5,537	4,471	2,218	193
1972	12,004	13,643	5,598	5,034	2,818	193
1973	12,749	14,073	5,628	5,034	3,218	193
1974	13,539	15,096	5,851	5,034	4,018	193
1975	14,379	16,012	5,897	5,504	4,418	193
1976	15,272	17,261,	6,063	5,974	5,218	6
1977	16,220	17,821	6,223	5,974	5,618	6
1978	17,226	19,021	6,353	6,444	6,218	6
1979	18,296	20,407	6,399	7,384	6,618	6
1980	19,433	21,725	6,447	7,854	7,418	6

\*First 200 mw Unit installed in 1965  
but not considered dependable capacity  
until 1967; second 200 mw unit added in  
1967.







1 For the benefit of those present I may make  
2 some quick reference to the attached tables. I  
3 don't think it is necessary to read them in any  
4 detail. Table I deals with our history, starts up  
5 in 1949, with 6,130 tons of coal, goes up to the  
6 peak in 1958 and in 1959 was up 214,000.

7 "   
8 Table II ----

9 THE CHAIRMAN: What fuel has been substituted  
10 for coal in 1958/9 or was there some other reason?

11 MR. CUNNINGHAM: Water, hydraulic resources,  
12 St. Lawrence power coming in which means that we  
13 haven't had to operate our steam plants to the same  
14 capacity.

15 THE CHAIRMAN: That resulted from the Seaway?

16 MR. CUNNINGHAM: Sir, Adam Beck and the Seaway,  
17 Niagara generating stations and the St. Lawrence  
18 seaway stations. Our steam plants are for peak  
19 loads. Our base loads are carried back on our  
20 hydraulic stations.

21 Table number II forecasts coal requirements.  
22 You will note up to 1967 there is no difference -  
23 1966 there is no difference under either A or B.  
24 A-being if no nuclear plant is developed beyond NPD  
25 and CANDU number I and B being if a high rate of  
26 nuclear development is assumed.

27 In 1969, however, we start to note its effects.  
28 Under column A we estimate 6,379,000 tons; for  
29 column B if nuclear power is an economic reality,  
30 it will be four million, three hundred-odd thousand.





1 Carry this through to 1979 we find a much different  
2 picture. A-our estimate is 24,000,000 and 62,000 tons  
3 with no further nuclear, and with nuclear 6,255,000  
4 tons, and so on.

5 Table III, I think, is self-explanatory. It  
6 sets forth our resources under Hydro-Electric Thermal  
7 Electric, conventional and nuclear and the appendix  
8 number I, which I might read, is the excerpts  
9 from conclusions of report on burning of Nova Scotia  
10 coal.  
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EXCERPTS FROM  
CONCLUSIONS OF REPORT ON BURNING OF  
NOVA SCOTIA COAL

Appendix 1

The burning of this 10,000 tons showed that Nova Scotia coal can be used for firing the existing boilers at the R.L. Hearn GS on 2 - shift operation, and that no decrease in efficiency or output will result. Hence, it can be stated that, on a short-term basis, the Commission can, in any year, afford to pay for Nova Scotia coal, on a cents per million B.Th.U. delivered basis, a price equal to the lowest acceptable tender for American coal. This was 32.26 cents in 1958. \*If the Commission can buy Nova Scotia coal on the above basis, it should not find itself significantly out of pocket for any increase in generation cost caused by handling the coal when wet.

On a longer term basis, information about the effects is necessary in order to evaluate all the characteristics of Nova Scotia coal and to determine on what basis the Commission can afford to buy it. Under emergency conditions, it may be necessary to operate the thermal plants on a 3-shift basis at full load for prolonged periods. This might not be possible or alternatively might require extensive soot blowing or water landing with consequent increase in operating costs. The burning of this coal might





1 be accompanied by an increase in maintenance costs  
2 owing to possible increased corrosion of air heaters  
3 or exhaust ducting. Stocking also might be difficult  
4 owing to spontaneous combustion and reclaiming or  
5 handling costs might prove to be abnormally high.

6 The only way the Commission can evaluate the  
7 above effects is to purchase and burn a substantial  
8 quantity of Nova Scotia coal over a period of years.  
9 Formulae, developed by others, for evaluating coal  
10 characteristics on a monetary basis are not  
11 considered a valid substitute for actually determining  
12 the Commission's costs by burning a substantial  
13 quantity of coal.

14  
15 By way of information there is an  
16 asterisk and the asterisk says:

17  
18 Nova Scotia coal has a higher moisture  
19 content when received and a higher receptivity to  
20 moisture on the stock pile than coals presently  
21 being used.

22 Thank you.

23  
24  
25  
26 MR. GUNN: Has the Hydro-Electric Power  
27 Commission of Ontario any order in now for Nova Scotia  
28 coal?

29 MR. CUNNINGHAM: No sir, we have no orders in  
30 for coal.





1 MR. GUNN: Coal of any kind?

2 MR. CUNNINGHAM: No sir.

3 MR. GUNN: And in the foreseeable future do  
4 you see any possibility of ordering Nova Scotia coal?  
5 I realize you have read Appendix I to us, but is  
6 there any possibility?

7 MR. CUNNINGHAM: " In keeping with the policy's  
8 statement which I gave this will dictate where our  
9 coal is purchased on a cost per million BTU basis;  
10 assuming that the test I referred to was conducted  
11 in our 100 megawatt unit station at the Richard L.  
12 Hearne station, of which we have four. The last four  
13 units going in there are 200,000 which this statement  
14 does not apply to until such time as we run a  
15 comparable test. Units at our new Lakeview station  
16 are 300,000 and the same holds true there.

17  
18 MR. GUNN: If the coal measures up and the  
19 price is competitive, there is a possibility of  
20 buying Nova Scotia coal?

21 MR. CUNNINGHAM: Yes sir.

22 THE CHAIRMAN: 32¢ a million British  
23 Thermal units. What does that mean in terms of  
24 tonnage cost?

25 MR. CUNNINGHAM: Well it depends on the  
26 specification of the coal but in round figures -  
27 so many coal men here today I hesitate to say -  
28 \$8.75 to \$9.00. It is in that range.

29 THE CHAIRMAN: That was assuming that you  
30 have about 26,000 units to the ton or 13,000 ?







1 MR. CUNNINGHAM: Yes.

2 THE CHAIRMAN: You multiply that by two?

3 MR. CUNNINGHAM: Yes.

4 THE CHAIRMAN: Now have you attempted to  
5 compute what this would represent with the subvention?

6 MR. CUNNINGHAM: With the subvention?

7 THE CHAIRMAN: " With the subvention?

8 MR. CUNNINGHAM: Well we have Mr. Chairman.  
9 When we go out for coal, we go out on a sealed tender  
10 basis of our requirements and the Dominion Steel  
11 and Coal is one of the recipients of these requests  
12 for tender. Always have been.

13 THE CHAIRMAN: Was the 10,000 tons bought  
14 by you ?

15 MR. CUNNINGHAM: Yes sir. It was in  
16 collaboration with a specific test which they shared  
17 part of the cost of.

18 THE CHAIRMAN: Was it the ordinary price or  
19 any special price?

20 MR. CUNNINGHAM: It was a special price for  
21 that trial burn, yes sir.

22 THE CHAIRMAN: You show a very strong  
23 increasing demand over the next ten or twenty years.

24 MR. CUNNINGHAM: Very much so. Table II.

25 THE CHAIRMAN: And you are assuming that  
26 is so because you will give coal a preference for  
27 use with power production. You have nothing in mind  
28 that oil or gas will enter into this situation?

29 MR. CUNNINGHAM: We can only there go by the  
30





1 historic aspects. Neither of the two you mention  
2 are competitive at the present time.

3 THE CHAIRMAN: And therefore you disregard those  
4 at the moment?

5 MR. CUNNINGHAM: I don't disregard them. I  
6 said nuclear or other fuels.

7 THE CHAIRMAN: "I was dealing with gas and oil.

8 MR. CUNNINGHAM: That might be one of the other  
9 fuels and our plants are convertible to gas or oil  
10 if necessary depending on the economics.

11 THE CHAIRMAN: Gas, oil, coal all nuclear?

12 MR. CUNNINGHAM: Uranium or something else  
13 might be converted.

14 THE CHAIRMAN: And that involves no change  
15 in your structural condition?

16 MR. CUNNINGHAM: Yes, there is a change  
17 but our plants are so designed that they can be  
18 converted.

19 THE CHAIRMAN: You think that that 32¢  
20 probably is the maximum or the minimum or what?

21 MR. CUNNINGHAM: We have been out of the  
22 market, Mr. Chairman, for the last year. It is  
23 probably up slightly from that now, but I would guess  
24 that 32, 33¢ will be a competitive coal cost.

25 THE CHAIRMAN: Have you any view on the  
26 probable increase of either gas or oil, increasing  
27 price?

28 MR. CUNNINGHAM: Not that I think would be  
29 of much use to this Commission, no. We have certainly  
30







1 investigated both for our station.

2 THE CHAIRMAN: At the present time you don't  
3 ask then for tenders?

4 MR. CUNNINGHAM: We have negotiated with  
5 Trans-Canada and Twin City at the Lakehead and  
6 Consumers' Gas in Toronto.

7 THE CHAIRMAN: " Do you send them requests for  
8 tender?

9 MR. CUNNINGHAM: Not on our coal, no.

10 THE CHAIRMAN: Or other fuel?

11 MR. CUNNINGHAM: Well now. If we were going  
12 to burn gas, it would not be on a tender basis.  
13 We would have to negotiate these arrangements.

14 THE CHAIRMAN: What about oil?

15 MR. CUNNINGHAM: Much the same thing there.

16 THE CHAIRMAN: Be an individual arrangement?

17 MR. CUNNINGHAM: Yes sir. We use oil of  
18 course along with coal to start off, and so on.  
19 Our steam station; use considerable quantities of  
20 it.

21 THE CHAIRMAN: There is nothing objectionable,  
22 as I gather from your report in the quality or the  
23 character of Cape Breton coal?

24 MR. CUNNINGHAM: Not as far as we are concerned,  
25 on a 2-shift operation, 100 megawatt unit. We would  
26 have to prove this out on the newer and later units  
27 that were presently installed.

28 THE CHAIRMAN: You mean on the 200?

29 MR. CUNNINGHAM: On the 200 and also the 300.  
30





1 THE CHAIRMAN: Just explain what that 100 and  
2 200 means?

3 MR. CUNNINGHAM: That is the total capacity  
4 of the unit.

5 THE CHAIRMAN: How would that affect the  
6 question of the satisfactory nature of the coal?

7 MR. CUNNINGHAM:" I am not an engineer so I  
8 cannot give you the technical background. We do  
9 not really believe that it will affect us too  
10 seriously but what I am saying is we would have to  
11 reserve the right to run tests to prove or disprove.

12 THE CHAIRMAN: What is the condition the  
13 coal has to satisfy to meet the one beyond that?  
14 Are there any differences?

15 MR. CUNNINGHAM: For example, on a 3-shift  
16 operation at our Hearn Station, we would expect  
17 some difficulty burning Nova Scotia coal.

18 THE CHAIRMAN: Due to what?

19 MR. CUNNINGHAM: The low fusion for one thing,  
20 the high sulphur and the moisture.

21 THE CHAIRMAN: Does this involve a greater  
22 use of the furnace in the period of a day say?

23 MR. CUNNINGHAM: Yes.

24 THE CHAIRMAN: A greater use just in time?

25 MR. CUNNINGHAM: Well I don't know whether  
26 you would refer to a greater use or lower output  
27 in production.

28 THE CHAIRMAN: Is that only a question of  
29 greater length of time of use?  
30





1 MR. CUNNINGHAM: No, there are additional  
2 maintenance costs that could be involved as well.

3 THE CHAIRMAN: There is no difference in the  
4 heat required?

5 MR. CUNNINGHAM: No.

6 THE CHAIRMAN: So it is just a longer use  
7 of the Nova Scotia coal in a furnace may lead to  
8 greater maintenance costs because of the low fusion  
9 point?

10 MR. CUNNINGHAM: That is right, and the  
11 moisture and the sulphur.

12 THE CHAIRMAN: That remains to be seen if there  
13 is any test. Any other questions?

14 (No answer)

15 Thank you, Mr. Cunningham.

16 MR. ELLIS: I would like to enquire if  
17 Mr. W. A. Vanderburgh is present this afternoon?

18 (No answer)

19 Mr. Commissioner, there are no further  
20 briefs scheduled for today.

21 THE CHAIRMAN: Is there anybody present who  
22 has any interest in this who would care to make any  
23 sort of statement? You see all we are seeking here  
24 is to find out what the realities of this difficult  
25 situation are, and I welcome it from any quarter.  
26 If there are not, we will adjourn until ten o'clock  
27 tomorrow morning.

28 ---The hearing adjourned until 10 o'clock, Tuesday  
29 morning, February 16th, 1960.  
30











1 ---On resuming, Tuesday, February 16th, 1960,  
2 at 10:00 o'clock, a.m.

---

3  
4  
5 MR. ELLIS: May I call upon Doctor C.J.Potter  
6 who will present his brief on behalf of the National  
7 Coal Association. This brief will become Exhibit  
8 number 15 in the records of the company.

9 THE CHAIRMAN: Doctor Potter, will you mind  
10 stating at first your present position and your  
11 experience with coal problems in the United States  
12 as well as Canada?

13 DR. POTTER: Presently I am Chairman of  
14 the Rochester and Pittsburgh Coal Company. Our head  
15 office is in Indianna, Pennsylvania. We produce  
16 5½ to 5 million tons of bituminous coal per year.

17 We operate coke ovens. We export coal to  
18 Canada only. We do not export to any other country.  
19 We have a subsidiary company in Canada known as  
20 Rochester and Pittsburgh Coal Company, Canada, Limited.

21 THE CHAIRMAN: I understand that you are a  
22 mining engineer?

23 DR. POTTER: Well no sir. I graduated in the  
24 School of Mines and Metallurgy of the University of  
25 Missouri. I have the degree of chemical engineer.  
26 I later attended West Virginia University where I  
27 received a doctorate in Philosophy in Chemical  
28 Engineering.

29 I have received an honourary degree, Doctor of  
30 Engineering, from the University of Missouri.







1 I began my work with the United States  
2 Government about 1940 at which time I was asked by  
3 the Government to head up a marketing group to determine  
4 minimum prices of coal produced in the United States  
5 and from that I obtained a fairly large knowledge  
6 of the United States Coal industry.

7 "Of course I left the Government service after  
8 that particular job was finished and went with the  
9 company with which I am now associated. During the  
10 war, the Secretary of the Interior asked me to head  
11 up the Solid Fuels Administration. I became his  
12 deputy. Our job was to distribute all the coals  
13 produced in the United States and again in that  
14 particular job I was also Deputy-Coal Mines  
15 Administrator.

16 There were several Government seizures, if  
17 you recall, in the United States during the war  
18 and the mines were operated by the Government.  
19 I had to do that particular job.

20 THE CHAIRMAN: What did that distribution  
21 of coal involve? Just in the United States?

22 DR. POTTER: There were later -- when Canada came  
23 into the war, it was our judgment unless we channelled  
24 the proper coals into the proper market avenues, we  
25 would run out of coal.

26 THE CHAIRMAN: "We" Who do you mean?

27 DR. POTTER: The United States. We also  
28 had the job of fueling a great deal to the rest of  
29 the world. I might add sir, that metallurgical coal  
30





1 was one of our chief problems during the war. We  
2 wanted to give the steel mills the best possible coal  
3 we could get for them so that we could get the  
4 greatest yield of steel. I just cite that as an  
5 example.

6 Canada required large quantities of coal from  
7 the United States. Canada formed the Office of  
8 Coal Controller during the war. Mr. Ernest Brunning  
9 of Montreal was head of the Office of Coal Controller.  
10 We met with him and decided -- I will show that  
11 a little bit later -- we decided we would operate  
12 just as if they were all the same countries insofar  
13 as the coal industry was concerned.

14 We then had to form what we called a  
15 Combined Coal Committee, which was made up of  
16 representatives of Canada, Great Britain, United  
17 States. As such, we were responsible for the  
18 movement of coal throughout the world. To take a  
19 point, we would ship, say, South Africa coal to  
20 South America, or into the Mediterranean, and they  
21 would say later on supply coal for India or other  
22 places either from Great Britain or the United States  
23 depending on the availability of shipping.

24 During the war, for example, we had the job  
25 that we put coal into England for stock piling for the  
26 invasion. We also had to send our own engineers into  
27 North Africa to run the railroads. We used our own coal.  
28 It was quite extensive during the war.

29 THE CHAIRMAN: I suppose that gave you an  
30







1 acquaintance with coal conditions in this country?

2 DR. POTTER: Yes, quite thoroughly. Lord  
3 Hyndley, who was chairman of the National Coal  
4 Board of Great Britain and I were appointed by the  
5 Combined Chiefs of Staff to tour Europe right at the  
6 end of the war. As a matter of fact, we were on  
7 our trip before the war ended.

8 The idea was to determine what we could do  
9 in getting maximum coal production in Europe for the  
10 reason that without coal production there could be  
11 no transportation; without transportation there  
12 could be no food, etc. It is the old circle. You  
13 had to start the circle someplace. We did that and  
14 we reported back to the Combined Chiefs.

15 At that same time we, the Solid Fuel  
16 Administration, was responsible for the supplies to  
17 the mines with their raw - critical materials.  
18 We had a War Production Board. We happened to be  
19 claimant agency and did claim our share of material  
20 for mining purposes.

21 I was a Member of the War Manpower Commission  
22 of the United States.

23 THE CHAIRMAN: You had a very extensive  
24 acquaintance- you formed a very extensive acquaintance  
25 with coal conditions in the whole of the west?

26 DR. POTTER: I think I have been most fortunate  
27 sir, that I have had the opportunity to do this. It  
28 has been an unique experience.  
29  
30







1 Mr. Chairman, this brief is submitted on  
2 behalf of the National Coal Association, pursuant to an  
3 invitation received from Honourable Ivan C. Rand,  
4 The Commissioner, Royal Commission on Coal, dated  
5 December 3, 1959.

6 The purposes of this brief are to submit factors,  
7 economic and historical, which it is believed may  
8 be helpful to the Commissioner in carrying out his  
9 assignment under the "terms of reference" made  
10 co-incident with his appointment by the Prime Minister.

11 The "terms of reference" are:

12 "To enquire into and make recommendations  
13 concerning:

14 "(a) the present and future markets for  
15 coal as a source of energy and for other  
16 purposes in the various regions of  
17 Canada;

18 "(b) the steps that can reasonably be  
19 taken to reduce the cost of production  
20 of coal in the various coal producing  
21 areas of Canada and the costs of its  
22 distribution to Canadian markets;

23 "(c) the steps that the Canadian coal  
24 producing industry can take to secure  
25 as large a market as possible for  
26 Canadian coal and to place and maintain  
27 the industry on an economic basis;

28 "(d) the measures that can be reasonably  
29 adopted by governments to support the  
30 economic production, distribution and  
sale of Canadian coal; and

(e) such other related matters as  
the Commission considers appropriate in  
reporting on those specified above."

The National Coal Association is a voluntary  
nonprofit organization, incorporated under the laws  
of the State of Delaware. Its membership embraces





1 coal companies producing and marketing the major portion  
2 of the bituminous coal produced in the United States.  
3 Hence, it is national in scope in its representations  
4 and operations. Member companies are also the principal  
5 United States coal suppliers to Canadian markets under  
6 consideration here.  
7

8 Preparation of this brief was under the  
9 direction and supervision of Charles J. Potter, who  
10 is acting as chief spokesman for the Association.

11 Generally speaking, bituminous coal shipped  
12 to Canada from the United States originates at  
13 mines located in the following coal producing  
14 districts: These are districts that were named  
15 for price fixing purposes, and prices of the  
16 bituminous coal areas east of the Mississippi with  
17 the exception of Alabama. In other words, Toronto,  
18 for example, can get coals from the United States  
19 from all those sources that I indicated. It happens  
20 to be one of the more fortunate areas in which it  
21 has more coals and different kinds available to-day  
22 than any other place in the world.

- 23 District 1 - Central area of the State of  
Pennsylvania  
24 District 2 - Western area of the State of  
Pennsylvania  
25 District 3 - Northern West Virginia  
26 District 4 - State of Ohio  
27 District 6 - Panhandle area of the State of  
West Virginia  
28 District 7 - Southern Low Volatile-Southern  
West Virginia and Virginia  
29 District 8 - Southern High Volatile- Southern  
West Virginia, Virginia, Kentucky  
30 and Tennessee







1 District 9 - West Kentucky  
2 District 10- State of Illinois  
3 District 11- State of Indiana  
4

5 The coal producing districts shown are those  
6 which were established pursuant to "The Bituminous  
7 Coal Act of 1937" and which identify certain  
8 geographical coal producing areas. The "District"  
9 designation has been used throughout the industry  
10 since 1937 and is generally known and understood  
11 throughout the trade, by the consumer as well as the  
12 producer.

13 Several of the larger U.S. coal producing  
14 companies have subsidiary companies in Canada which  
15 market their own coals and also coals produced  
16 by other U.S. producing companies. These subsidiary  
17 companies maintain lake coal docks where cargoes of  
18 coal are stored and later transshipped inland to  
19 Canadian consumers. There are also a number of  
20 independent coal dock companies which handle U.S.  
21 produced coal from companies not affiliated with  
22 Canadian coal dock companies. There are approximately  
23 85/<sup>1</sup> coal dock operations along the lake front at  
24 various points between Montreal and Fort William.  
25 All help contribute to the economic growth of Canada  
26 and over the years have become an integral part of  
27 the Canadian economy. That these coal dock  
28 operations have a substantial stake in the coal  
29 industry of Canada, through investments, facilities  
30 employees, and related affiliations, has been fully

/1 Source: Brief of Canadian Coal Dock Operators to  
Acting Prime Minister, Honorable H. P. Greene.  
November 4, 1958 - Page 1.





1 disclosed in briefs and other statements submitted  
2 by the Canadian Commercial Dock Operators.

3 I might point out sir, that it is my  
4 judgment - this is in reply to some of the questions  
5 you asked yesterday - that there would be approximately  
6 10,000 people involved in the distribution of coal  
7 along the lakefront. That is the dock operators,  
8 not just the lakefront but including down the St.  
9 Lawrence River. Approximately ten thousand people.  
10 That would not include the boating companies, those  
11 who transship coal. Nor will that include the  
12 railways who might send it beyond.

13 Working capital on that will exceed \$50,000,000  
14 in those particular companies at the height of their  
15 storage season and that is only for coals which are  
16 transshipped past the docks and which generally are  
17 held in the name of these dock companies.

18 Capital investment will run from say oh a few  
19 hundred thousand dollars per dock to well beyond that,  
20 and it was pointed out to you yesterday that a great  
21 deal of the dock area is owned by the Dominion or  
22 Provincial government.

23 For example, we will lease docks in Montreal  
24 and the lease is from the St. Lawrence Seaway Commission;  
25 in Toronto, it is from the Harbour Commission, so  
26 the capital utilized by these dock companies is  
27 great.

28 "Historically, the bituminous coal industry  
29  
30







1 of the United States has supplied a very substantial  
2 portion of the energy requirements of the Dominion  
3 of Canada. Most of the bituminous coal exported  
4 from the U.S. into Canada is consumed in the heavily  
5 populated and fast-growing industrialized Provinces  
6 of Ontario and Quebec. Huge supplies of coal have  
7 been imported during periods of national emergency  
8 in Canada, such as in wartime and on the occasion of  
9 labor strife in the Canadian and British coalfields.  
10 If some emergency should again arise in Canada that  
11 affected the production of Canadian coal or developed  
12 an unusually high demand for coal, the bituminous  
13 coal industry of the United States would again be  
14 called upon to supplement, to an even greater  
15 degree, Canada's requirements and would, of course,  
16 respond to this request, provided future Canadian  
17 fuel policies can be such that the threat to the  
18 continuity of supply from the U.S. is removed.  
19

20 By that statement I mean, I think the extreme-  
21 if it was off again, on again source of supply it  
22 would become very difficult. We do not anticipate  
23 any such thing. I merely wanted to explain that  
24 particular statement.

25 At present, the subvention program for the  
26 improvement of Canadian coal production and  
27 distribution, together with increased competition from  
28 oil and gas, impose an increasing, unrealistic, and  
29 discriminatory pressure on U.S. coal exports to Canada.  
30







The present program will jeopardize continuance of a sound economic U.S. coal export program.

The following table shows the total consumption of bituminous coal in Canada along with the amount imported from the United States, for a period of twenty years:

In other words, take Table I shows the United States is supplying approximately 50% of the coal used in Canada irrespective of the Canadian demand.

TABLE I

Consumption of Bituminous Coal in Canada 1939-1958  
(Millions of Net Tons)

	Canadian Consumption of Bituminous Coal, All Sources (1) (2)	Bituminous Coal Imported from United States	Percent Canadian Consumption Supplied by U.S.
Year			
1939	25.1	9.8	39.0
1940	29.7	13.4	45.1
1941	33.4	17.8	53.3
1942	37.3	20.8	55.8
1943	41.1	24.3	59.1
1944	40.5	25.5	60.5
1945	36.8	21.2	57.6
1946	38.9	22.0	56.5
1947	45.4	25.8	56.8
1948	42.9	25.7	59.9
1949	34.5	15.8	45.8
1950	41.3	22.5	54.5
1951	40.6	22.4	55.2
1952	37.9	20.7	54.6
1953	35.1	19.5	55.5
1954	30.4	15.7	51.6
1955	31.0	16.8	54.2
1956	34.8	20.5	58.9
1957	30.8	18.0	58.4
1958	23.1	11.8	51.0

(1) Includes bituminous, sub-bituminous and lignite.





(2) Available for Consumption.

Source: Dominion Bureau of Statistics.

It is significant that during the past twenty years, despite the application of several forms of government aid, there has been no increase in the percent of Canadian coal consumption provided by Canadian producers.

The importance of U.S. coal to the economic growth of the Province of Ontario is shown in the following table:

Table II, there you will note that practically the entire consumption in Ontario is from the United States coal companies.

Table 2

BITUMINOUS COAL AVAILABLE FOR CONSUMPTION, ONTARIO,  
(Millions of Net Tons)  
1939 - 1958

<u>Year</u>	<u>Total Tons</u>	<u>Tons U.S.</u>	<u>Percent U.S.</u>
1939	9.7	8.3	85.5
1940	12.5	11.4	91.2
1941	13.8	13.5	97.8
1942	15.5	15.2	98.0
1943	16.9	16.9	100.0
1944	17.2	17.1	99.4
1945	14.9	14.7	98.6
1946	16.0	15.7	98.1
1947	17.9	17.8	99.4
1948	19.3	19.1	98.9
1949	13.3	13.2	99.2
1950	18.9	18.7	98.9
1951	18.7	18.5	98.9
1952	17.3	17.2	99.4
1953	16.9	16.8	99.4
1954	13.6	13.4	98.5
1955		14.6	
1956	17.7	17.6	99.4
1957	15.7	15.6	99.4
1958	10.7	10.6	99.0







Source: Dominion Bureau of Statistics.

Note: Import figures 1939-1948 are indicated as retained for consumption. Subsequent to 1948, figures are direct imports to Province of Ontario.

Again there is to be seen the large and steady demand for U.S. coal during the period when Central Canada's industrial and business expansion was mushrooming.

Table 3 shows the consumption of bituminous coal in the Province of Quebec with the amount furnished by the United States:

During the war we had to take over the load in that particular area that was formerly supplied by the Eastern coals produced in Canada and the coals to do this job originated as far west as Illinois and West Kentucky. We railed coal from West Kentucky into Halifax for locomotive fuel during the war but normally most of the Quebec market has been Nova Scotia coals.

Table 3

Bituminous Coal Available for Consumption, Quebec,  
1939-1958 (Millions of Net Tons)

<u>Year</u>	<u>Total Tons</u>	<u>Tons U.S.</u>	<u>Percent U.S.</u>
1939	3.6	1.3	36.1
1940	4.4	1.8	40.9
1941	6.0	4.1	68.3
1942	6.9	5.2	75.4
1943	7.0	6.3	90.0





Year	Total Tons	Tons U.S.	Percent U.S.
1944	6.6	6.0	90.9
1945	5.6	5.4	96.4
1946	5.9	5.3	89.3
1947	6.9	6.4	92.7
1948	6.9	5.1	73.9
1949	4.3	2.4	55.8
1950	5.6	3.7	66.1
1951	5.6	3.8	67.8
1952	5.0	3.4	68.0
1953	4.4	2.5	56.8
1954	4.6	2.1	45.6
1955		2.0	
1956	5.0	2.8	56.0
1957	4.7	2.4	51.1
1958	3.6	1.2	33.3

Source: Dominion Bureau of Statistics.

Note: Import figures for 1939-1948 are designated as retained for consumption. Subsequent to 1948, figures are imports direct to Quebec.

Even though much energy expansion in the Province of Quebec occurred over the past 20 years, Table 3 shows that there was no appreciable increase in coal consumption. In fact, there has been a substantial decrease in consumption of both Canadian and U.S. coals.

The percentage of U.S. production of bituminous coal exported to Canada is shown in Table 4.

Here we say it might be argued that the United States market for coal in Canada is not of great moment to the United States producers. The facts are that it is only in the order of 2,3, 4 percent yet the major sources of supply is from those producers with





a short freight rate out of the United States into Canada but I think it is quite important. For example, many producers will ship up to 15 to 20% of their output into Canada.

Table 4

U.S. Exports of Bituminous Coal to Canada, 1939-1958  
(Millions of Net Tons)

<u>Year</u>	<u>U.S. Production</u>	<u>Exports to Canada</u>	<u>% Exported to Canada</u>
1939	394.8	9.8	2.48
1940	460.8	13.4	2.91
1941	514.1	17.8	3.46
1942	582.7	20.8	3.56
1943	590.2	24.3	4.12
1944	619.6	24.5	3.95
1945	577.6	21.2	3.67
1946	533.9	22.0	4.12
1947	630.6	25.8	4.09
1948	599.5	25.7	4.29
1949	437.9	15.8	3.61
1950	516.3	22.5	4.36
1951	533.6	22.4	4.20
1952	466.8	20.7	4.43
1953	457.3	19.5	4.26
1954	391.7	15.7	4.00
1955	464.6	16.8	3.62
1956	500.7	20.5	4.09
1957	492.7	18.0	3.65
1958	410.4	11.8	2.87

Source: U.S. Bureau of Mines.  
Dominion Bureau of Statistics.

While the total bituminous coal exported from the United States to Canada constitutes a relatively small percentage of total U.S. production, this does not alter the fact that shipments to Canada are very important to the producing districts in the United States enjoying this business. Practically all of the bituminous coal exported to Canada from the United States is produced in the eastern Appalachian







1  
2 area, in the producing districts previously listed.

3 That Canada, through the years, has been  
4 regarded as a normal market for the sale of certain  
5 U.S. produced bituminous coals has certainly been  
6 demonstrated by the manner in which our Government  
7 as well as the coal producers, have served the  
8 Canadian consumers in times of emergency as well as  
9 other periods when Federal controls were invoked on  
10 the U.S. bituminous coal industry by legislative  
11 fiat or Federal government directives.

12 For instance, when the United States Government  
13 established a Solid Fuels Administration for War  
14 (During World War II), it recognized the obligation  
15 of U.S. coal producers to supply their "normal  
16 markets" in Canada and proceeded to establish  
17 regulatory controls to assure Canada of its  
18 necessary U.S. coal supply. Under the provisions of  
19 Solid Fuels Administration for War, the first  
20 preference on coal shipments went to all receivers  
21 of by-product or special purpose coals. The  
22 steel companies in Canada, therefore, received a  
23 first preference on their coal requirements, the same  
24 as similar users in the United States, and thus  
25 received their coal before other classes of consumers  
26 in the United States. Similarly, the second  
27 preference under S.F.A.W. regulations went to retail  
28 dealers and, therefore, Canadian retail dealers  
29 received their coal the same as did U.S. retail dealers  
30





1 when the shipments moved by rail. The third  
2 preference was for consumers receiving coal by the  
3 lake cargo routes. Hence, the Canadian consumer  
4 who received U.S. coal via lake movement had a  
5 decided advantage over U.S. consumers in other  
6 categories, for the reason that the bulk of  
7 bituminous coal imported into Canada moves by water.  
8 As a result, the Canadian consumers receiving coal by  
9 water for uses other than steelmaking and consumers  
10 receiving coal from retail dealers were assured of their  
11 supply of coal even before the same classes of  
12 consumers in the United States. Regulations were  
13 not issued by the S.F.A.W. without prior consultation  
14 and agreement with the offices of the Coal Controller  
15 of the Dominion of Canada.

16 Not only did the U.S. bituminous coal industry  
17 take care of its normal markets in Canada but it also  
18 supplied the increased demand for coal brought about  
19 by the war effort and the postwar industrial expansion,  
20 as will be noted by reference to Table 1, showing that  
21 U.S. exports of bituminous coal exceeded 25 million tons  
22 on two occasions and accounted for almost 60% of  
23 Canada's coal requirements several times.

24 In 1942, the United States Congress passed  
25 the Emergency Price Control Act and thereby set up  
26 the Office of Price Administration with authority  
27 to establish maximum prices on any commodity. On  
28 May 18, 1942, maximum prices were established  
29 f.o.b mines on all coals produced in the United States.  
30







1 While the Office of Price Administration had  
2 no authority over the resale price at which coal  
3 could be sold in Canada, nevertheless it provided  
4 the fullest protection possible to the Canadian  
5 consumer by providing the following rule as a  
6 part of the Maximum Price Regulation No.120  
7 applying on the sale of bituminous coal:

8 'The maximum prices established herein apply  
9 to all sales by a producer or a distributor  
10 at, or for delivery from, a mine or a  
11 preparation plant operated as an adjunct  
12 of a mine or mines to destinations in  
13 Continental United States, the Territories  
14 of Alaska, and Hawaii, the District of  
15 Columbia and the Dominion of Canada:  
16 Provided, however, that subject to  
17 such future regulations as may be appropriate  
18 the maximum prices established herein shall  
19 not apply to the resale of United States  
20 bituminous coal by Canadian distributors  
21 who import such coal from the United States  
22 into the Dominion of Canada and resell  
23 it for consumption in the Dominion of  
24 Canada.'

25 There was no objection made to the Office of  
26 the Price Administration by the bituminous coal  
27 industry when the foregoing provisions as to  
28 maximum prices were applied to sales in Canada.  
29 Thus, no attempt was made by the U.S. bituminous  
30 coal industry to take advantage of the Canadian  
coal consumer at a time when such action might have  
been possible, and the U.S. Government felt it had a  
duty to protect the Canadian consumer of U.S.  
bituminous coal.

It is well known that there are ample  
reserves of bituminous coal in the United States





1 to supply her needs as well as those of Canada for  
2 hundreds of years and that major reserves in the U.S.  
3 are nearer to Ontario and Quebec markets than are  
4 Canadian coals. /

5 With the foregoing as a background, it is  
6 appropriate to turn to the specific items of  
7 inquiry set forth in the terms of reference establishing  
8 the Royal Commission on Coal (1959)

9 Reference:

- 10 (a) the present and future markets  
11 for coal as a source of energy  
12 in the various regions of Canada.

13 In order to forecast future markets for coal  
14 in Canada, it is necessary, first of all, to project  
15 total energy requirements. A reliable tool for this  
16 is a per capita consumption. This method has been  
17 employed in projecting energy requirements in the  
18 United States, and, while its adequacy for the long-  
19 term view remains to be shown, it has proven  
20 reasonably accurate for many years in the United States  
21 and we believe the same system should be adequate for  
22 projecting energy consumption in Canada.

23 Appendix A is a table showing population in  
24 Canada through 1959 with projections to 1975. In this  
25 instance, we have accepted the population estimates  
26 of the Royal Commission on Canada's Economic Prospects,  
27 titled 'Output, Labour and Capital in The Canadian  
28 Economy,' dated February, 1957, using the estimates  
29 based on net immigration of 75,000 per annum.

30 1/ Recoverable reserves of coal in the United States  
are estimated at 950 billion tons, enough to meet  
needs at current rates of consumption for more than  
2,000 years (U.S. Geologic Survey-Coal Resources of







1           That is not the top or the bottom. It was  
2 in between.

3           Employing authoritative Canadian sources  
4 for past and present energy consumption in the  
5 Dominion of Canada, by ordinary mathematical  
6 computations the per capita consumption of energy  
7 is projected in total and by sources. This  
8 information is shown on Chart I. Background data  
9 are shown in Appendix B, with the same conversion  
10 factors as used by the Dominion Coal Board. However,  
11 with respect to gas consumption, the Report of the  
12 Department of Mines and Technical Survey for 1957 and  
13 1958 is used as a base. Largely by the process of  
14 personal judgment, data for the previous years have  
15 been revised to eliminate the effect of waste gas  
16 which is not energy consumption. The possible error  
17 in judgment is statistically quite small and,  
18 therefore, will not seriously affect the results.

19           It will be noted from Chart I that if  
20 based on a pure mathematical trend, in a relatively  
21 short period of time no coal at all would be consumed  
22 in Canada and oil, gas and hydro would eventually  
23 exceed the total energy requirements. Obviously, this  
24 is impossible. Therefore, while it is a reasonably  
25 sound practice to project total energy requirements  
26 per capita mathematically, when it comes to  
27 considering the individual sources that go to make up  
28 the total energy requirements one must be careful  
29  
30



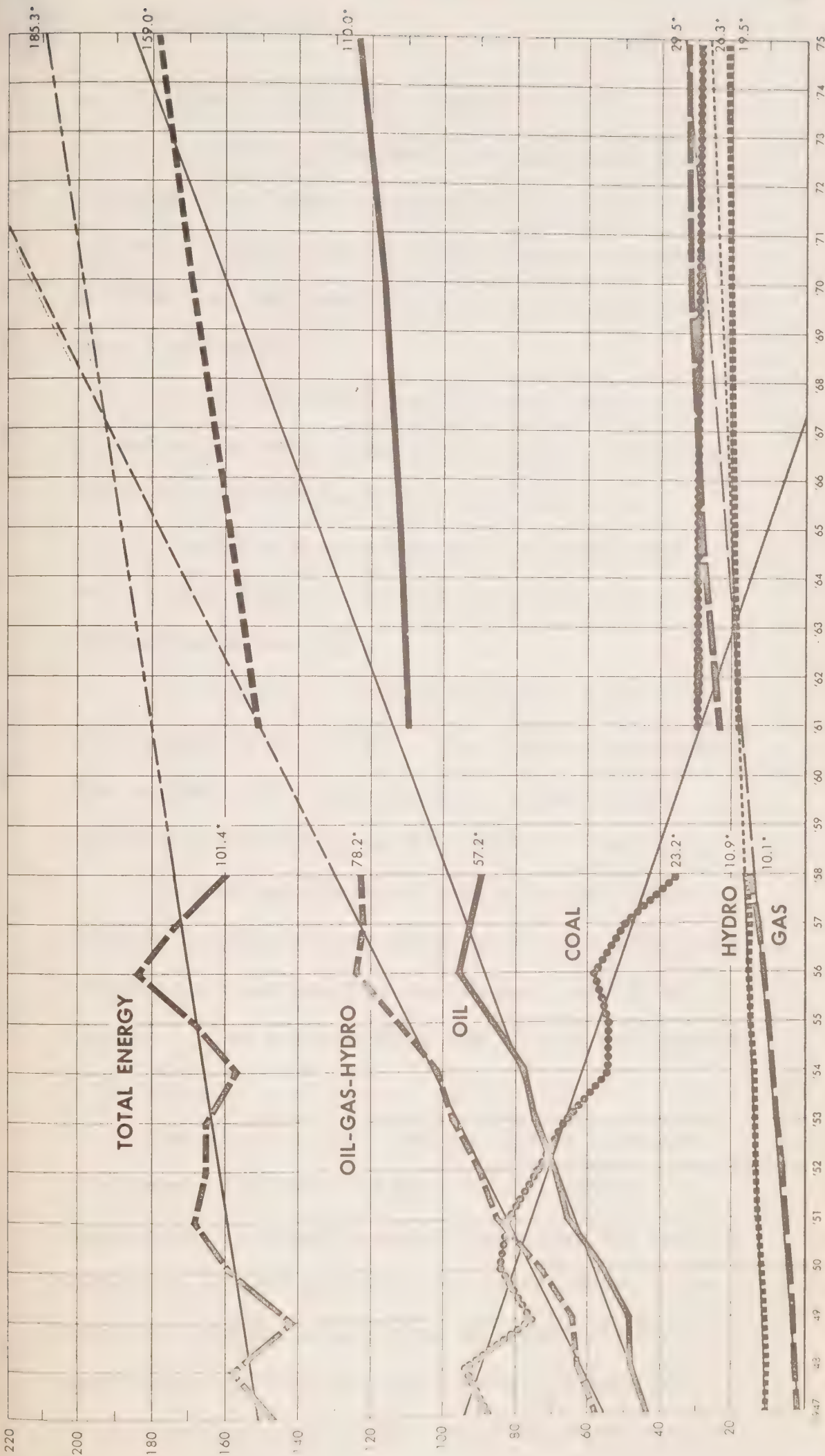


# PER CAPITA CONSUMPTION OF ENERGY FUELS IN CANADA

1947-1958 ACTUAL WITH 1947-1975 CALCULATED TREND

ADJUSTED TREND

MILLIONS OF  
BTU'S



\* INDICATES TOTAL CONSUMPTION IN MILLIONS OF TONS OF COAL EQUIVALENT.





1 in utilizing a statistical trend.

2 Accordingly, the 'over-lay' for Chart I  
3 indicates what future consumption of the various  
4 sources of energy will be in the Dominion of Canada  
5 in order that the total projected energy requirements  
6 are not exceeded.

7 It will be seen from the chart that the  
8 projection for coal, beginning with 1961, indicates a  
9 per capita consumption of 29.7 million BTU.

10 It will also be noted that the chart does not  
11 indicate any change in the per capita rate of coal  
12 consumption through 1975.

13 DR. POTTER: Before I go ahead sir I will  
14 try to explain this chart. The top line underneath  
15 this overlay is the total energy consumption per  
16 capita that we foresee in the future in Canada.

17 We have had identical curves in the United  
18 States. In other words, energy grows at a relatively  
19 constant rate and has been so for more than 20 or  
20 30 years. We see no reason why it will not continue  
21 to do that.

22 The error is quite small. You will notice  
23 in no case is it even 10% with a total energy  
24 consumption. Further, you will note that the bad  
25 years such as 1948 and 1954 are clearly shown. The  
26 boom year of 1956 is indicated by additional energy  
27 requirements so from the total energy picture you  
28 can practically read the history of a company insofar  
29 as business is concerned.  
30







1 Now that total energy is the key to this whole  
2 discussion on what will be the energy requirements  
3 in Canada. It is obvious that the individual parts  
4 cannot exceed the whole of the energy. Therefore,  
5 let's look to what has happened to oil by itself.  
6 That is the third line down.

7 You will note that oil has been growing at  
8 a fairly constant rate. You will also note at the  
9 bottom that hydro and gas have been growing at a  
10 fairly rapid rate. Now if we combine all those  
11 and use a this line, oil, gas and hydro, it will show  
12 that about 1967 there would be no coal at all  
13 consumed in Canada.

14 That obviously is not so, so what else does  
15 this chart mean? It means that the rate of  
16 consumption of oil and gas in Canada must decline.  
17 In other words, this rate of growth can not continue  
18 in the future as it has been doing up to to-day,  
19 because it would supply all the energy, and that is  
20 impossible.

21 We have gone through exactly the same problem  
22 in the United States. It was predicted that oil  
23 consumption, the rate of growth would drastically  
24 fall off some three years ago. That is taking place  
25 and will continue to take place because no one energy  
26 source is going to squeeze all the energy sources  
27 out.

28 Now if you will accept sir, what I have just  
29 said as being the truth, this over-lay is something  
30





1 along the line as to what happened in Canada. In  
2 other words, we do not believe that coal will continue  
3 to decline past 1961, that is coal consumption in  
4 Canada, and I will try to explain why.

5 We note that Hydro is going to continue to  
6 expand. I will talk about that later. We note that  
7 gas is continuing to expand, and if coal does not  
8 expand at all and both the markets that we have  
9 estimated that it would have by 1961, oil must fall  
10 off and we have shown in that second over-lay curve  
11 that oil must decline substantially in its rate  
12 of growth.

13 Now sir, I would like to mention with respect  
14 to the terms of reference, that is, what is Canada's  
15 energy picture, we discussed Saskatchewan, Manitoba,  
16 Alberta, British Columbia, Nova Scotia and New  
17 Brunswick and with your permission sir, I won't  
18 read that. I will ~~commence~~ over on page 15 with  
19 Nova Scotia and New Brunswick.

20  
21  
22 Nova Scotia - New Brunswick

23 Combined production in these provinces in  
24 1958 totalled approximately 6.1 million tons.

25 Of the 800,000 tons produced in New Brunswick  
26 72,000 tons entered the U.S. duty free, while 109,000  
27 tons were shipped to the Province of Quebec on which  
28 subventions averaging approximately \$1.61 per ton  
29 were paid. Railway fuel accounted for 15,000 tons.  
30





Taking into account the fact that most of the New Brunswick production is used within the province, it is believed that expected losses would not be great.

Nova Scotia produces the largest tonnage of coal in Canada, and in 1958 this amounted to roughly one-half of present production of all kinds of coal and over two-thirds of all bituminous coal. Table 5 shows Canadian production figures for coal and the percentage represented by Nova Scotia mines.

In other words, Nova Scotia has steadily increased on its share of Canadian coal, Canadian - produced coal market.

Table 5

Production of Coal in Canada  
(1947 - 1958)  
(Millions of Net Tons)

Year	Total Coal	Bit- uminous Coal	Nova Scotia Coal	Percent	Percent
				Nova Scotia of Can- adian Bitum- inous Coal	Nova Scotia of Can- adian Bitum- inous Coal
1947	15.9	11.0	4.1	25.8	37.3
1948	18.4	13.7	6.4	34.8	46.7
1949	19.1	14.1	6.2	32.5	43.9
1950	19.1	13.6	6.5	34.0	47.8
1951	18.6	13.4	6.3	33.9	47.0
1952	17.6	12.7	5.9	33.5	46.4
1953	15.9	11.5	5.8	36.5	50.4
1954	14.9	10.3	5.8	38.9	56.3
1955	14.8	10.2	5.7	38.5	56.4
1956	14.9	10.3	5.8	38.9	56.3
1957	13.2	9.0	5.7	43.2	63.3
1958	11.7	7.7	5.3	45.3	68.8

Source: Dominion Bureau of Statistics.







1 At one time Nova Scotia enjoyed a substantial  
2 railway fuel business, but with the advent of the diesel  
3 locomotive this market has declined rapidly and will  
4 probably continue to decline until there is very  
5 little, if any, left. In 1958 railway fuel accounted  
6 for 95,000 tons of Nova Scotia business.

7 We believe they will lose all that.

8 Approximately 700,000 tons of Nova Scotia coal  
9 is used for coke making, on which the Canadian  
10 Government pays a bonus to the Steel Company of  
11 49.5 cents per ton as provided for in the Canadian  
12 Coal Equity Act. It is believed this market will not  
13 drop below an average of 650,000 tons of coal per  
14 year and is not now subject to competition from  
15 other fuels or U.S. coal.

16 The point I am making in the 49½ cents  
17 per ton is that quite a number of years ago the  
18 Canadian Government made an attempt to move Nova  
19 Scotia coal to any consumer who would use that coal  
20 at 49½ cents a ton. To the best of my knowledge,  
21 I believe only one attempted to do so, and that was  
22 Montreal Coke and Coal Manufacturing Company, and it  
23 was done by paying them a duty. The reason for  
24 bringing that out was to show the difference between  
25 people such as Algoma and Stelco who do not get that.  
26 In other words, anyone who uses Nova Scotia coal,  
27 there is a payment against these other companies.

28 THE CHAIRMAN: Does that go to the Steel  
29 company?  
30





1 DR. POTTER: I don't know, sir. I might add  
2 that no Nova Scotia coal is used in Montreal for that  
3 purpose, to the best of my knowledge.

4 In 1958, Nova Scotia marketed about 200,000  
5 tons in Newfoundland and Prince Edward Island. The maj-  
6 or portion of this is susceptible to competition  
7 from oil.

8 In other words, it can be lost, it can be lost  
9 to Nova Scotia coal.

10 Of the 133,000 tons of railway, fuel, bunkers,  
11 and exports shipped from Nova Scotia in 1958, a loss  
12 of approximately 100,000 tons to other fuels  
13 can be expected.

14 That is for this market, that is for dieselizat-  
15 ion.

16 Nova Scotia marketed 2.3 million tons of  
17 coal in Quebec in 1958, on which subvention payments  
18 averaged almost \$2.65 per ton. In contrast, in 1939,  
19 Nova Scotia had a market in Quebec for 3.1 million  
20 tons. Yet in fiscal 1939, the total subventions  
21 paid on Nova Scotia coal averaged only 93 cents per  
22 ton and applied on 1.3 million tons. Thus, despite  
23 ever increasing subvention payments, the market for  
24 Nova Scotia coal in Quebec is declining.

25 Again I refer you back to Table 3.

26 In discussing Nova Scotia coal markets, it  
27 would appear appropriate at this point to indicate  
28 that the Province of Quebec consumed 1.7 million tons  
29 of U.S. coal in 1939 and practically the same  
30







1 amount in 1958. Of this amount, 500,000 tons is  
2 anthracite and 200,000 tons coking coal.

3 I make that statement to show that anthracite,  
4 which is primarily used for domestic uses, and the  
5 coking coal - one is hardly competitive with gas  
6 any more; it has already had its difficulty with gas.  
7 Neither one of those two coals are available in  
8 Canada.

9 Under competitive conditions presently  
10 existing and appearing to exist in the foreseeable  
11 future, we might well expect to lose at least  
12 500,000 tons of U.S. steam coal in the Quebec market  
13 to oil and gas. It will not be lost to Nova Scotia  
14 coal without substantially greater subvention  
15 payments. It is also generally known there are many  
16 instances where the burning equipment is not suitable  
17 to the use of Nova Scotia coals.

18 For example, there are still certain types  
19 of stokers in operation in Quebec which were designed  
20 for U.S. coals, and it would take a complete change  
21 of that burning equipment to utilize Nova Scotia coals.  
22 Technically, it can be done, but it is a matter of  
23 economics that the coal consumer decides for himself.

24 THE CHAIRMAN: I don't quite understand what  
25 you said about the coking coal, 200,000 tons.

26 DR. POTTER: That is not competitive with  
27 Nova Scotia coals; that is the U.S. coals.

28 THE CHAIRMAN: Why not?

29 DR. POTTER: Well, the only coke consumer left  
30





1 is the Montreal Coke and Coal Manufacturing Company,  
2 and its manufacture of gas has been practically  
3 eliminated, this is for domestic purposes.  
4 Natural gas has come into the Montreal market. What  
5 the coke company does today is make foundry coke,  
6 which is the highest grade produced. It has  
7 extremely low sulphur, very great strength. In the  
8 aggregate there are limited sources of supplies for  
9 those particular coals. But Montreal Coke and  
10 Manufacturing has now eliminated all of the higher  
11 ash, high-sulphur coals and are making low ash and  
12 sulphur coals.

13 THE CHAIRMAN: And that is not obtainable in  
14 Nova Scotia?

15 DR. POTTER: No, it is not, and it is not  
16 available in the United States.

17 With respect to U.S. competition with Nova  
18 Scotia coals in Quebec, it might be pointed out that  
19 all-rail coal from Northern West Virginia can deliver  
20 in Montreal for \$12.19 per ton, whereas the same coal  
21 moving via lake delivers alongside dock at \$10.68  
22 per ton.  
23

24 Table 6 shows the cost of U.S. coal in  
25 Montreal.  
26  
27  
28  
29  
30





Table 6

Cost of U.S. Coal in Montreal  
(Per Net Ton)

	Delivered Cost Via All-rail Movement	Alongside Cost Via Lake Cargo Movement
Coal f.o.b. Mine	\$4.80	\$4.80
Rail freight from N.W.Va.	7.39	
Rail freight to Lake Ontario		3.56
Vessel rate to Montreal		1.75
St.Lawrence Toll		.40
Canadian Duty	.50	.50
Harbour Dues		.088
	<u>\$12.69</u>	<u>\$11.098</u>
Less currency equalization @5% on coal and freight to border	.50	.42
Delivered Cost	<u>\$12.19</u>	<u>\$10.678</u>

The first column is a delivered cost via all-rail movement. Some coal goes by lake, either Lake Erie or Lake Ontario. The coal price that I have used of \$4.80 is the current price being paid by major public utilities, that is electric generating stations in the United States on a coal which is more similar to Nova Scotia. This coal actually comes from West Virginia. From BTU and Sulphur standpoint, it is the nearest thing to Nova Scotia coals that we have in great volume. The various utilities, of course, file prices for the various fuels that they pay. It shows a delivered cost via rail of \$12.19 and via lake of \$10.678.







1 The charge there is inserted to put everything  
2 in Canadian dollars.

3 It will be noted from Table 6, that with Nova  
4 Scotia coal costing \$10.72<sup>1</sup>/per ton at the mine,  
5 it is obvious that the transportation charges on this  
6 coal must not exceed \$1.47 per ton to enable it to  
7 compete with U.S. coal moving by the all-rail routes.  
8 Actually, the transportation charges on Nova Scotia  
9 coal, moving by water to Montreal, amount to \$3.16<sup>1</sup>/  
10 per ton alongside dock. However, due to the fact  
11 that most of the U.S. coal moving to Montreal  
12 utilizes the lake route, the delivered cost alongside  
13 dock, as shown in Table 6, is \$10.68 per ton, or  
14 4 cents per ton less than the cost of production of  
15 Nova Scotia coal. Thus, it is impossible for Nova  
16 Scotia coals to compete with U.S. coals without  
17 governmental assistance.

18 Table 7 is a comparison of costs of competing  
19 fuels in Montreal:

20 1/ Dominion Coal Board, Annual Report, 1958-1959,  
21 page 15.





Table 7

Comparison of Cost of Fuels<sup>2</sup>  
In Montreal, Que.

(Per Ton of coal equivalent)

	<u>Nor. West Va. Coal</u>	<u>Nova Scotia Coal</u>	<u>Resid- ual Coal</u>	<u>Natur- al Gas</u>
Price f.o.b. Mine	\$4.80	\$10.72	\$2.10	35¢
Rail freight	3.56	1.55	per bbl.	per Mcf.
Vessel Rate	1.75	1.52	at 4.2 bbls per ton	at 24,900 cu.ft. per ton
Tolls	.40	-		
Duty	.50			
Harbour Dues	.088	.088		
Less Currency Eq.	.42			
Total	\$10.68	\$13.88	\$8.82	\$8.72

1/ Mines to Sidney \$1.10, dumping and trimming \$.45  
vessel rate to Montreal \$1.52, harbor dues \$.088 -  
Total \$3.158

2/ Costs shown for coal are for alongside dock  
delivery, Cost for residual oil is f.o.b. refinery.  
Cost for gas is as delivered to consumer.  
Transportation, handling and/or delivery charges must  
be added to the coal and oil cost shown, depending  
on the location of the consumer.

Table 7 shows West Virginia coal alongside  
docks contrasted with Nova Scotia coal alongside  
docks, without any subventions, and also with the  
current price of residual oil and also compared to  
the price of natural gas being quoted to large  
consumers in the Montreal area. It will be seen that  
why we take that position is not to get kicked out of  
the major portion of the Quebec market while Nova  
Scotia coal attempts to compete; our problem is with  
oil and gas.







1 In Table 7, a price of \$10.72 per ton, f.o.b.  
2 mine is used for Nova Scotia coal which is actually the  
3 production cost. Prices used for oil and gas are  
4 current offerings.

5 From the information shown in Table 7, it  
6 appears that Nova Scotia's problem in Quebec is oil  
7 and gas competition, not U.S. coal. This is so  
8 because, despite the fact that Nova Scotia coal is  
9 granted a subvention to enable it to compete with  
10 U.S. coal, the consumption of Nova Scotia coal is  
11 declining in this area. Therefore, if it is concluded  
12 that the major production of coal in Nova Scotia  
13 is to be maintained, consideration must be given to  
14 the granting of subventions to enable it to compete  
15 with oil and gas, not just with U.S. coal.

16 In other words, it can't go anyplace in  
17 attempting to be subsidized against U.S. coal only.

18 It is doubtful if the Nova Scotia coal industry  
19 can maintain markets for 4.2 million tons of coal  
20 without the aid of subventions against oil and gas.

21 We try to show that there is a little bit of  
22 U.S. coal business that can be taken away in that  
23 area, but there is intense competition between oil  
24 and gas and that is going to drive our coal out and  
25 in turn drive Nova Scotia coal out, and if they are  
26 going to stay in business at all, they have to  
27 compete with those prices in those markets.

#### 28 Ontario Markets

29 The Province of Ontario requires, annually,  
30





1 about four million tons of U.S. coal for  
2 carbonization into coke and much of this coal comes  
3 from mines owned by Canadian Steel Companies. It  
4 enters Canada practically duty free, and it is now, sir.  
5 Further, no Canadian source of energy is currently  
6 competitive with this coal.

7 Table 8 shows the consumption of U.S. coals  
8 in Ontario for 1958, by use, as well as the expected  
9 minimum consumption by 1961.

10 TABLE 8

11 Consumption of U.S. coals in Ontario, 1958-1961  
12 (Thousands of tons)

	<u>1958</u>	<u>1961</u>
14 Coal for carbonization	4,000	4,000
15 Retail anthracite	974	500
16 Retail bituminous	1,717	1,100
17 Industrial Anthracite	94	100
18 Industrial Bituminous	<u>5,581</u>	<u>3,750</u>
19 Total	12,366	9,450

20 Source: 1958 distribution, from  
21 Dominion Bureau of Statistics.

22 We do not think there will be an increase for  
23 carbonization of coal. This despite the fact of  
24 expanding steel industry. The reason why is that there  
25 is a great deal of efficiency in the manufacture of  
26 steel from coal; that is, pounds of coke used in the  
27 making of steel have gone from 1700 pounds a few years  
28 ago down to, in certain plants, as low as 200 pounds  
29 of coke. The Steel industry is taking advantage  
30 of better technology and their expansion for a greater





1 output of steel is just about balancing the increased  
2 efficiency in the manufacture of iron. So we don't  
3 feel there will be any increase in the use of coal  
4 for carbonization. We think we will probably lose  
5 600,000 tons more to oil and gas, and we think we  
6 will lose a great deal of industrial bituminous,  
7 particularly to gas, in Ontario.

8 Table 8 indicates that the expected minimum  
9 consumption of U.S. coals in Ontario, exclusive  
10 of coal for coking, will total 5.5 million tons.  
11 To reach this minimum market it is expected that  
12 anthracite for retail, which embraces mostly home  
13 heating, will continue to decline in the  
14 metropolitan areas. However, in the suburban areas  
15 anthracite will continue to be used for a number  
16 of years.

17 The indicated decline in the use of bituminous  
18 coal in the retail market will be brought about by  
19 competition from oil and gas. In the Toronto area,  
20 the expected decline in retail use of bituminous  
21 coal will not be very great because a substantial  
22 amount is consumed in small off-track industrial  
23 plants and in large buildings, such as apartments and  
24 hotels.

25 The greatest decline in the use of U.S.  
26 bituminous coal in Ontario will take place in  
27 industrial markets. This will come about primarily  
28 by reason of oil and gas competition, and to a lesser  
29 extent by competition from hydro.

30 Table 9 compares the cost of competing fuels







Table 9

Comparison of Cost of Fuels in Toronto 1/  
(Per ton of coal equivalent)

	Nor. West Va. Coal	Nova Scotia Coal	Residual Oil	Natural Gas
Price f.o.b. Mine	\$ 4.80	\$10.72	\$3.01 per 50¢ per bbl.	50¢ per Mcf
Rail freight	3.56	1.55	-	-
Vessel rate	.85	4.27 2/	at 4.2 bbls at per ton	24,900 cu. ft. per ton
Duty	.50			
Harbor dues	.06	.06		
Less currency Eq.	.42	-		
Total	\$ 9.35	\$16.60	\$12.64	\$12.45

1/ Costs shown for coal are for alongside dock delivery. Cost for residual oil is f.o.b. refinery. Cost for gas is as delivered to consumer. Transportation, handling and/or delivery charges must be added to the coal and oil cost shown, depending on the location of the consumer.

2/ Made up as follows: Vessel rate Sidney to Montreal, \$1.52; Estimated minimum transfer cost, \$.60; Vessel rate to Montreal to Toronto, \$1.75; Seaway Toll, \$.40; Total, \$4.27.

I can say that U.S. coal has a decided advantage over all other fuels in the Toronto area. The price of \$9.35 is about 2 cents per million, not quite, greater than the price of hydro indicated yesterday in the testimony. I can see why hydro are considering coal as their basic source of energy in Ontario in the future.

From the information shown on Table 9, it would appear that oil and gas are not competitive with U.S. coal. However, these fuels will displace coal, especially in small plants where labor cost for coal use makes it more expensive than using oil or gas. This has already happened in numerous instances in





1 in the United States. In an area, such as Sarnia,  
2 Ontario, where oil refineries are located, residual  
3 oil can and, no doubt will, displace substantial  
4 quantities of coal because the price of the residual  
5 will be made low enough to take the coal business,  
6 as there are no other markets for the residual oil.

7 If the selling tactics of the gas pipeline  
8 companies are continued in Ontario, the losses  
9 indicated for coal in the industrial markets will  
10 certainly take place. These tactics include the  
11 selling of gas at prices lower than the cost of coal  
12 plus amortization where the equipment is converted to  
13 enable gas to be used. Regardless of the price shown  
14 for gas in Table 9, it is still possible for the  
15 pipeline companies to continue this practice. The  
16 U.S. gas industry originally indulged in a similar  
17 practice, although this is now being restrained by  
18 the Federal Power Commission.

19  
20  
21 Canadian Coal Market in General

22 Appendix C is a statement consisting of 4 pages  
23 and sets forth the distribution of energy by use  
24 classification in Canada for the years 1947 through  
25 1958. On page 1 will be noted the decline in  
26 domestic use of coal from 13 million tons to 6 million  
27 tons occurred between 1947 and 1958, over half of  
28 which decline has been in Ontario-Quebec. These  
29 tonnage figures are arrived at by use of 27 million  
30







1 BTU's per ton as a conversion factor.

2 This decline in the use of domestic coal will  
3 no doubt continue as oil and gas displace coal.  
4 Stoker coal use has declined, but the rate of  
5 conversion will slow down chiefly because not much  
6 of this business is left.

7 In the past, coal consumption for industrial  
8 purposes has remained fairly constant in the face  
9 of increasing energy requirements. Increased demand  
10 for those products has gone to oil and gas, as is  
11 shown in Appendix C.

12 Coal has stayed just about constant in this  
13 particular market. All the increased energy  
14 requirements have gone to oil and gas.

15 Primary electric demand for industrial  
16 purposes has increased. This has come about by  
17 reason of: (1) increase in the general economy,  
18 and (2) conversions --- where formerly electrical  
19 energy was generated in numerous small plants, it  
20 is now purchased.

21 For transportation use, coal has declined from  
22 14 million tons in the year 1947 to 2.4 million tons  
23 in 1958. It will no doubt continue to decline as diesels  
24 completely replace the steam locomotive. This  
25 development is not unlike that which has occurred in  
26 the United States.

27 Coal for carbonization into coke remains fairly  
28 constant, except for periods of high or low industrial  
29 activity with its consequent greater or lesser demand  
30





for steel.

Summarizing, it is believed that the minimum coal market in Canada by 1961 will be divided substantially as follows:

Table 10

Predicted Minimum Coal Market in Canada - 1961  
(Millions of Tons)

U.S. (for carbonizing)	4.0	-	Ontario
U.S. (Other)	5.5	-	Ontario
U.S. (for carbonizing)	.2	-	Quebec
U.S. (other)	.9	-	Quebec

Total U.S. 10.6 - the lowest it has ever been.

Maritime Production	4.9
Alberta-British Columbia	2.7
Saskatchewan	2.0
Total Canadian	<u>9.6</u>

Grand Total 20.2

Again, it is believed the figures in Table 10 represent the minimum coal requirements for Canada, and that this level is expected to be reached by 1961.

By means of conversion factors, the 20.2 million tons of coal for Canada by 1961 have been converted into thousands of British thermal units per capita by multiplying 20.2 million by 26 million BTU to give effect to the lignite in the total figure. The resultant BTU's were then divided by the estimated population for 1961 which thereby





1 established the adjusted trend line for coal on  
2 Chart I.

3 That is to tell how we arrived at that  
4 decreased use of oil.

5 It is believed that the per capita consumption  
6 for coal will remain stabilized at about this level.  
7 Therefore, the only probable increase in coal use  
8 between 1961 and 1975 should come from the dual  
9 effects of increased energy demand and increasing  
10 population.

#### 12 Projected Gas Consumption

13 Referring again to Chart I, it will be noted  
14 that the projection for gas is based on the minimum  
15 findings of the Royal Commission on Energy with  
16 respect to Canadian gas markets.

17 With completion of the Trans-Canada Pipeline,  
18 gas consumption in Canada increased rapidly in a short  
19 period of time. Accordingly, a statistical growth  
20 rate based on past performance would not be reliable;  
21 hence, the decision to use the projections made by  
22 the Royal Commission on Energy. Even so, it will be  
23 noted from the chart that the statistical  
24 projections are not too far off the Royal Commission  
25 estimates and would mean little change in the over-all  
26 conclusions.

27 All we are saying is that you can't project  
28 gas uses on what has happened in the last few years  
29 because of Trans-Canada. There is no second Trans-  
30







1 Canada in the offing to give that great boost.

2 By plotting the Royal Commission figures for  
3 1958 and their projections for the years 1963, 1968,  
4 1973, and 1983, we were able to interpolate the  
5 expected gas consumption for the years 1961, 1965,  
6 1970, and 1975 in terms of billions of cubic feet.  
7 The resulting figures were converted to British  
8 Thermal units and finally to per capita consumption  
9 in BTU's, which, in turn, determined the adjusted line  
10 on Chart I for gas.  
11

12  
13 Projected Hydro Consumption

14 As to the projection for hydro electricity,  
15 it will be noted that the trend is altered slightly  
16 downward from the mathematical growth trend because,  
17 while there is a large potential of undeveloped  
18 water power in Canada, most of it is in Quebec and in  
19 the Western Mountain section of the country.  
20 Consequently, when considering a per capita basis,  
21 it must be realized that these reserves are not in  
22 the Province of Ontario, where the greatest  
23 population is concentrated and where the largest  
24 absolute increase will probably take place. In fact,  
25 the Ontario Hydro Commission is presently building  
26 thermal plants, The statistical difference between  
27 the two estimates is relatively unimportant.  
28  
29  
30





### Projected Oil Consumption

By far, the greatest growth in energy consumption by source has occurred in oil. This was also true in the U.S., and just as in the U.S., the growth rate of oil consumption in Canada must decline. The reason for this statement is found in Chart I. It will be noted that the growth rate of oil, if continued, would eventually exceed total energy requirements. This, of course, is impossible, because we know that there are certain markets that will be supplied by coal, gas and hydro. Accordingly, given minimum markets for these three sources of energy as we have indicated, the growth rate of oil must decline in order to have our individual sources of energy remain within the bounds of total projected energy consumption. It will be seen from Chart I that the growth rate of oil has been modified accordingly.

Let me warn anyone reading these charts that we are talking about Canadian consumption, we are not talking about exports. This is really consumption in Canada and has nothing to do with exports.

Although the projected per capita consumption of the oil, gas, and hydro components making up the total energy requirements may not develop exactly along the lines indicated on Chart I, the fact that there will always remain a certain minimum requirement for coal means that the other three principal energy sources must fit into the total







1 energy pattern. Thus, the extent to which gas and  
2 hydro increase will accordingly alter the growth  
3 rate of oil. Chart I also indicates adjusted  
4 projection for oil, gas, and hydro combined, coal  
5 having been given a base growth rate.

6 Table II shows, in terms of coal equivalent  
7 tons, the distribution of total energy in Canada  
8 for the year 1947 and 1958, as well as projections  
9 for 1961, 1965, 1970 and 1975, and that is, Mr.  
10 Chairman, what we consider to be the present and  
11 the future energy market for coal as a source of  
12 energy, which was one of your terms of reference.  
13 It is a technical discussion, it will take some time,  
14 but we think it is fairly reliable for your use.

15 Also, the percent each component bears to  
16 the total.

17 Table II

18  
19 Canadian Energy - Tons Coal Equivalent  
20 (Millions of Tons of Coal Equivalent)

<u>Year</u>	<u>Coal</u>	<u>Oil</u>	<u>Gas</u>	<u>Hydro</u>	<u>Total</u>
1947	42.4	21.4	1.4	5.3	70.5
1958	23.2	57.2	10.1	10.9	101.4
1961	19.4	*72.0	15.1	11.8	118.3
1965	21.5	*80.9	20.2	13.7	136.3
1970	23.7	*93.6	25.7	16.4	159.4
1975	26.3	*110.0	29.5	19.5	185.3





Percent of Total

Year	Coal	Oil	Gas	Hydro	Total
1947	60.2	30.3	2.0	7.5	100.0
1958	22.9	56.4	10.0	10.7	100.0
1961	16.4	60.8	12.8	10.0	100.0
1965	15.8	59.3	14.8	10.1	100.0
1970	14.9	58.7	16.1	10.3	100.0
1975	14.2	59.4	15.9	10.5	100.0

\*Adjusted to arrive at total balance.

Source: Appendix B.

Thus, Table II represents what can be considered "the present and future market for coal as a source of energy."

Balance of Energy Sources

Canada and the U.S.

Recognizing the fact that the Royal Commission on Coal is specifically charged with certain enquiries and recommendations with respect to coal, nevertheless it is believed appropriate in the overall picture to discuss the exchange of energy sources between the two countries, particularly because coal as a source of energy is thereby directly affected.

Table 12 shows, for 1957 and 1958, the energy balance, by sources, between Canada and the U.S. in terms of coal equivalent tons. The dollar value of these energy exchanges is also known.

It will be noted that the amount of money paid





1 out by the Canadian Government as subventions has  
2 been included with the other duties paid by the U.S.  
3 in exporting energy fuels to Canada. This has been  
4 done because the subventions have the same effect  
5 on the U.S. coal industry as a protective trade  
6 tariff.

7                   "  
8 Table 12 shows that in 1957 the total dollar  
9 trade barrier against U.S. imports amounted to 71  
10 cents per ton of coal equivalent, whereas in 1958  
11 it had increased to \$1.01 per ton. In contrast,  
12 U.S. duties on Canadian energy sources imported  
13 by the U.S. amounted to 37 cents per ton of coal  
14 equivalent in 1957 and only 27 cents per ton  
15 in 1958. Thus in one year the net trade barrier  
16 against the U.S. increased by 40 cents per ton,  
17 for which increased subventions were primarily  
18 responsible.

19 Table 12 shows that on the basis of volume  
20 and more particularly on the basis of dollar duty  
21 balance, Canada is rapidly reaching a point  
22 where it may become a net exporter of energy. The  
23 effect of ever-increasing subvention payments and  
24 other restrictions against U.S. coals only, naturally  
25 raises the question as to whether or not a fixed trade  
26 policy actually exists between our two countries, so  
27 far as energy sources are concerned. One is inclined  
28 to the belief that continued extensions and increases  
29 in the amount of subventions to displace U.S. coals  
30 might well prompt the U.S. coal industry to seek the







the protection of its government in whatever form appears most effective, including the imposition of substantial duties on the importation of other forms of energy, such as natural gas and electricity, into the United States.

Table 12

UNITED STATES-CANADIAN TRADE VOLUME AND DUTIES BALANCE  
ON ENERGY SOURCES, 1957 and 1958

	<u>1957</u>		<u>1958</u>	
	Coal Equiva- lent Tons (Thous.)	Total Duties (Dollars)	Coal Equiva- lent Tons (Thous)	Total Duties (Dollars)
<u>U.S. to</u>				
<u>Canada.</u>				
Residual Oil	1,420	\$ 823,600	1,052	\$ 610,160
Crude Oil	1,824	-	255	-
Electrical				
Energy	367	-	114	-
Natural Gas	1,050	798,000	1,173	891,480
Coal	18,445	6,455,750	12,235	*4,282,250
Canadian				
Subventions		<u>8,320,143</u>		<u>9,186,020</u>
Total	23,106	16,397,493	14,829	14,969,910
Average trade barrier rate per ton			71¢	
<u>Canada to U.S.</u>				
Residual Oil	185	40,700	87	19,140
Crude Oil	11,912	5,598,640	6,779	3,186,130
Electric				
Energy	2,222	-	1,823	-
Natural Gas	483	-	2,819	-
Coal	367	-	307	-
Total	<u>15,169</u>	<u>\$5,639,340</u>	<u>11,815</u>	<u>\$3,205,270</u>
Average trade barrier rate per ton			37¢	

Source: Primary petroleum and gas data, coal data, electric energy data, and subvention data from U.S. Tariff Commission, Bureau of Mines, Federal Power Commission, Dominion Coal Board, "Trade of Canada." Dominion Bureau of Statistics-International Trade Division, External Trade Section, respectively. Basic U.S. tariff and/or import tax rates from U.S. Tariff Commission; Canadian duty rates from Canadian tariff schedules.





1 \*Based on a net duty of 35¢ per ton instead of 50¢  
2 by reason of the 99% drawback on U.S. Coal for coke  
3 making and other duty exempted coal.

4 Now, that is not a threat; it is only what  
5 any United States national would tend to do or  
6 any Canadian would tend to do. Actually nothing  
7 like that takes place; I don't see any reason for  
8 it.

9 Further, completely aside from the reaction  
10 of the U.S. coal industry to Canadian subventions  
11 which may or may not unduly concern this Commission,  
12 one cannot believe the subvention system against  
13 U.S. coals as well as the 50-cent per ton tariff  
14 to be a permanent solution to the Canadian coal  
15 problem, as will be pointed out in this brief.

16 Reference:

- 17 (b) "the steps that can reasonably be  
18 taken to reduce the cost of production  
19 of coal in the various coal producing  
20 areas of Canada and the costs of its  
21 distribution to Canadian markets."

22 There have been many studies concerning the  
23 Canadian coal industry, particularly with respect  
24 to the Maritime Provinces. Numerous suggestions  
25 have been made as to the manner in which production  
26 per man-day could be increased and cost of production  
27 reduced. The Canadian Government has loaned millions  
28 of dollars to the industry toward this goal and  
29 the producing companies have invested millions of  
30 their own dollars in attempting to make their product  
more competitive. Despite these expenditures, the end







results have not been satisfactory when measured in terms of cost of energy.

Table 13 shows production per man per day in the bituminous coal industry in the Maritimes, Alberta and British Columbia.

Table 13  
Production Per Man, Per Day  
in Canadian Bituminous Coal Mines  
(Net Tons)

<u>Year</u>	<u>Nova Scotia</u>	<u>New Brunswick</u>	<u>Alberta</u>	<u>British Columbia</u>
1948	2.198	2.421	4.331	4.087
1949	2.178	2.318	4.545	3.704
1950	2.235	2.286	4.503	3.718
1951	2.104	2.877	4.331	3.935
1952	2.006	3.043	4.395	3.983
1953	2.090	2.973	4.715	4.415
1954	2.220	3.158	4.370	4.612
1955	2.321	3.450	4.945	4.854
1956	2.409	3.679	5.107	4.846
1957	2.604	4.320	4.726	4.180
1958	2.662	3.904	4.860	4.193
1948-1958	/21.2%	/61.3%	/12.2%	/2.6%

Source: Dominion Bureau of Statistics.

It will be noted that production per man-day in the Nova Scotia Mines, increased only 21% between 1948 and 1958. Although there was an increase in productivity in the Nova Scotia mines, the cost of production actually increased.

Table 14 shows production per man-day in the U.S. Bituminous industry:





Table 14

Average Production Per Man, Per Day  
in the U.S. Bituminous Coal Industry 1948-1958

<u>Year</u>	<u>Net Tons</u> <u>Per Man-Day</u>
1948	6.26
1949	6.43
1950	6.77
1951	7.04
1952	7.47
1953	8.17
1954	9.47
1955	9.84
1956	10.28
1957	10.59
1958	11.33
1948-1958	81%

Source: U.S. Bureau of Mines.

It will be noted that between 1948 and 1958  
production per man-day increased 81%

Table 15 is a comparison of average value  
per ton of bituminous coal in the United States with  
that of Nova Scotia.

Table 15

Average Value Per Ton- Bituminous Coal  
Nova Scotia and U.S. 1948-1958

<u>Year</u>	<u>Nova Scotia</u>	<u>U.S.</u>
1948	\$ 7.44	\$ 4.99
1949	7.76	4.88
1950	7.56	4.84
1951	7.79	4.92
1952	8.67	4.90
1953	8.98	4.92
1954	8.89	4.52
1955	8.70	4.50
1956	8.82	4.82
1957	9.30	5.08
1958	9.55	4.86

Source: Dominion Bureau of Statistics  
U.S. Bureau of Mines.





1 The table on page 33 shows the average  
2 value per ton of bituminous coal in Nova Scotia  
3 and in the U.S. In other words, our cost of coal  
4 average is down a bit from 1948, whereas Nova Scotia  
5 is up quite substantially.

6 The only reason I am saying that sir is to  
7 show the probability of a decreased cost of Production  
8 in Nova Scotia just doesn't exist. Wages are lower  
9 than any place else. If anything, it is going to  
10 be raised rather than lowered.

11 All I am trying to say therefore there is I  
12 just don't see how Nova Scotia can reduce its cost  
13 of production in view of the continued inflation  
14 which is occurring throughout the world. It occurs  
15 in Canada, in the United States. It isn't going to  
16 stop. It is going to continue to grow that way.  
17 The next page merely shows the difference of a  
18 dollar per ton increase in the miner's wages, and  
19 production costs in Nova Scotia and the United States.  
20 It means 8.8 cents in the United States and 37.6 cents  
21 in Nova Scotia.

22 It will be noted from Table 15 that whereas  
23 the average value of U.S. coal has decreased during  
24 the past decade as a result of an increase of 81%  
25 in productivity per man-day, in Nova Scotia, on the  
26 other hand, the average value has increased even  
27 though productivity rose by 21%.

28 One of the reasons why cost of production in  
29  
30







1 Nova Scotia has not declined is that wage increases as  
2 well as increases in costs of maintenance, repairs, and  
3 supplies have more than offset the effects of  
4 increased productivity per man. In the United States  
5 there have also been substantial increases in these  
6 items of cost which, however, have been more than  
7 matched by greater productivity. Due to this  
8 unprecedented rate of output in the United States,  
9 the price of U.S. coal has remained almost constant,  
10 which has of course inured to the benefit of  
11 Canadian as well as American consumers but has caused  
12 Nova Scotia coal to become much less competitive.  
13

14 Even though miners' wages have increased in  
15 Nova Scotia, that increase was not as great as wages  
16 generally in other industries in Canada.

17 Table 16 is a comparison of average weekly wages  
18 in Canada by industries for the year 1949 and  
19 for the first eight months of 1959:  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30



Table 16

AVERAGE WEEKLY EARNINGS, BITUMINOUS COAL AND OTHER

SELECTED CANADIAN INDUSTRIES, 1949 vs. 1959

	<u>1949</u>	<u>(1)</u> <u>1959</u>	<u>Increase</u> <u>in</u> <u>Dollars</u>	<u>Percent</u> <u>Increase</u>
COAL MINING				
Nova Scotia	\$45.96	\$68.56	\$22.60	49.2
Canada	48.92	68.41	19.49	39.8
PRIMARY IRON & STEEL				
Nova Scotia	51.12	90.82	39.70	77.7
Canada	53.43	98.40	44.97	84.2
CONSTRUCTION				
Nova Scotia	30.34	52.82	22.48	74.1
Canada	41.28	76.47	35.19	85.2
TRANSPORTATION				
Nova Scotia	41.77	65.92	24.15	57.8
Canada	48.39	78.93	30.54	63.1
OTHER INDUSTRIES (Canada)				
Oil and Natural Gas	56.00	105.94	49.94	89.2
Paper Products	51.81	87.84	36.03	69.5
Fabricated Structural Steel	51.87	86.35	34.48	66.5
Products of Petroleum & Coal	55.77	111.04	55.28	99.1
Electric Light & Power	48.43	89.24	40.81	84.3
Chemical Products	47.61	78.93	31.32	65.8

Source: Dominion Bureau of Statistics.

(1) Eight months 1959.







1  
2 It will be noted from Table 16 that in 1949  
3 the average weekly earnings in the Nova Scotia coal  
4 industry closely approximated the earnings in other  
5 industries. In 1959, they are not even close.  
6 Thus, it is believed that wages in the Nova Scotia  
7 coal industry will of necessity have to increase,  
8 resulting in a higher cost of production. It is  
9 significant to note in this connection, the  
10 statement made in the Urwick, Currie Limited  
11 Report on the Nova Scotia Coal Industry, dated  
12 June, 1956, prepared for the Royal Commission on  
13 Canada's Economic Prospects, at pages 17 and 18:

14 "... The miners have not had an increase in  
15 pay for the past four years and although  
16 we understand that agreement has been reached  
17 that no increase will apply for another year,  
18 ~~increases~~ will nevertheless have to be given  
during the period to 1960. We have estimated  
that every one dollar a day granted will  
increase the price of coal at a five million  
ton output level in 1960 by 50¢ a ton."

19 In spite of attempts to hold down miners'  
20 wages in an endeavour to make Nova Scotia coals more  
21 competitive, the fact remains that costs have  
22 increased and the possibility of continuing to keep  
23 wages down in the face of the general trend in the  
24 economy of ~~Canada~~, would seem impossible. For  
25 each dollar per day increase in miners' wages in Nova  
26 Scotia, the increased labor cost per ton, based on  
27 the 1958 average production per man-day would  
28 amount to 37.6 cents. In the U.S. bituminous coal  
29 industry, the labor cost per ton for each dollar per  
30





1 day wage increase, averages 8.8 cents, based on  
2 productivity per man-day in 1958. Here again, is  
3 emphasized the difficulty encountered by Nova Scotia  
4 in attempting to make its coal industry competitive  
5 with that of the U.S., let alone the matter of gas  
6 and oil.

7 Chart II, following this page, shows,  
8 graphically, this comparative impact on cost per ton,  
9 of mine wage increases in Nova Scotia and in the U.S.

10 If Nova Scotia is to hold its present  
11 competitive relationship with U.S. coal, it will be  
12 necessary to increase subventions 37.6 cents per ton  
13 for each dollar per day wage increase.

14 Frankly, even over an extended period of time  
15 there is no known way in which the cost of production  
16 in the Nova Scotia mines can be reduced. It is  
17 believed that the authorities who have made studies  
18 of the Nova Scotia coal problem heretofore, would  
19 agree with this conclusion. Indeed, the  
20 opportunities to reduce production costs are non-  
21 existent, unless there could be a reduction in wages,  
22 supplies and capital charges.

23 Nova Scotia coal producers have mining and  
24 engineering personnel who are recognized throughout  
25 the entire coal industry of the world as excellent,  
26 but this talent cannot overcome practically impossible  
27 physical mining conditons to increase productivity  
28 to a profitable level in the foreseeable future.

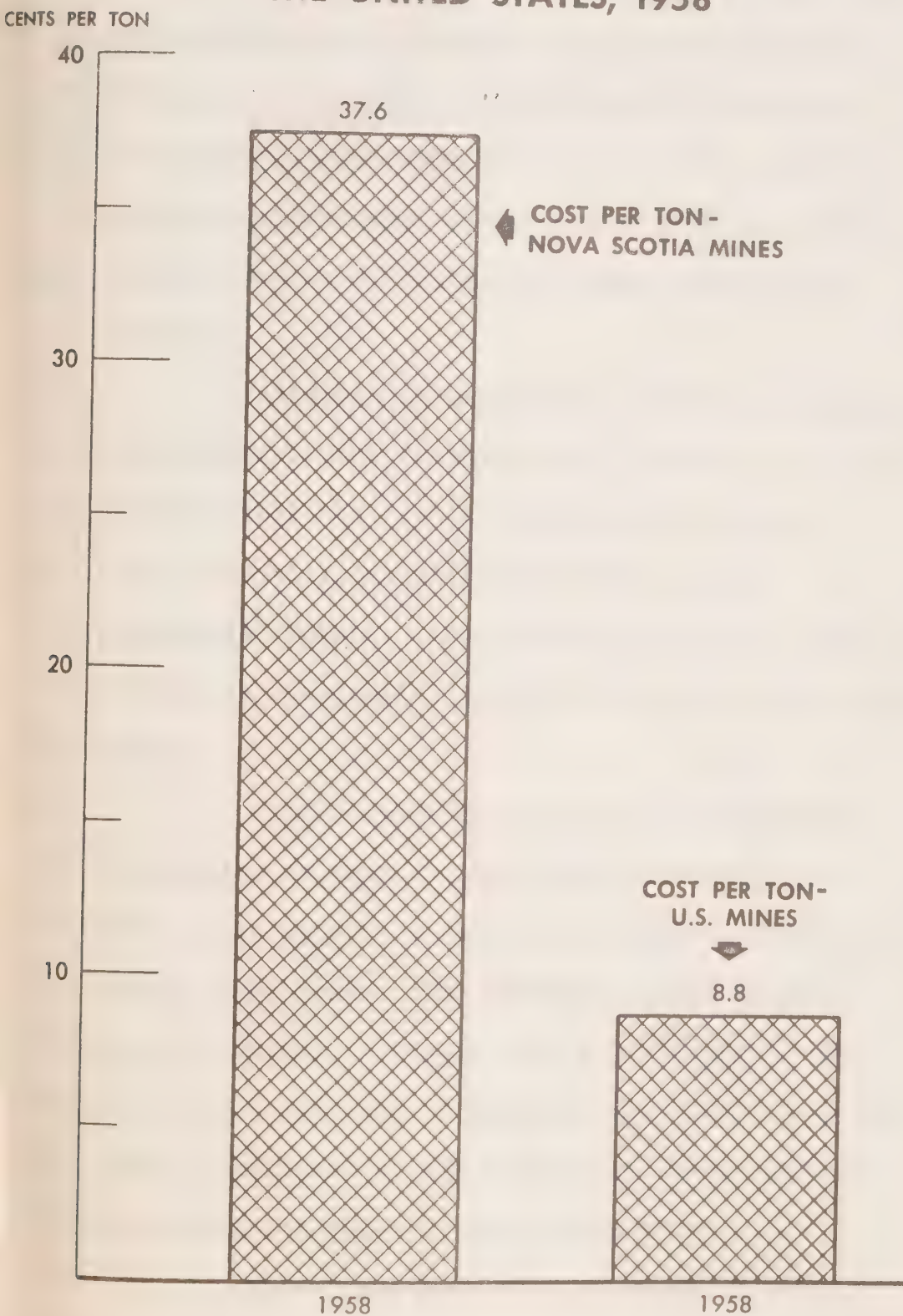
29 I might point out that "profitable level"  
30





CHART 2

**THE EFFECT OF \$1.00 PER TON INCREASE IN  
THE COAL MINERS' WAGES ON PRODUCTION  
COSTS IN NOVA SCOTIA AND  
THE UNITED STATES, 1958**



SOURCE: ANNUAL REPORT ON MINES FOR NOVA SCOTIA, 1958, AND U.S. BUREAU OF MINES.







1 is meant in competition with oil and gas.

2 Similar problems were faced in certain areas  
3 of the U.S. and the end result was the forced closing  
4 of mines of this type.

5 With respect to the mines located in the  
6 mountain sections of Alberta and British Columbia,  
7 because of seam conditions the cost of production  
8 is believed to be about as low as possible and no  
9 appreciable decrease in production cost is expected.  
10 Indeed, because of wages, the cost probably will  
11 increase.

12 Although it may not be of any particular  
13 consolation to the Canadian coal industry, it is not  
14 expected that the cost of production in the U.S  
15 coal mines will materially decrease in the  
16 foreseeable future. About reached the end of the line  
17 insofar as substantial increase in productivity is con-  
18 cerned.

19 With respect to the cost of distribution,  
20 considering in this instance only transportation,  
21 there would appear to be very few opportunities to  
22 reduce these costs. The constant growth of the  
23 general economy in Canada with its attendant wage  
24 increases would make it apparent that there will be  
25 little likelihood of any substantial reductions in  
26 transportation rates by rail or by water.

27 There have been five permanent general  
28 increases in Canadian rail freight rates on coal  
29 since April 8, 1948, the most recent being effective  
30





1 December 1, 1958.

2 As to water transportation, the vessel rate  
3 from Sidney, Nova Scotia, to Montreal in 1958 of  
4 \$1.52 per ton was the lowest in years and, in fact,  
5 it is understood that the rate this year will be  
6 at least \$2.00 per ton. Distance considered, a  
7 rate of \$2.00 per ton is quite low, amounting to  
8 only 1.8 mills per ton-mile.

9 Conceivably, the total transportation cost  
10 from Nova Scotia to destinations west of Montreal may  
11 become less than the cost today, if suitable self-  
12 unloading vessels are made available, thus eliminating  
13 the necessity to transfer coal from one type vessel  
14 to another type at Montreal before proceeding west.  
15 Generally speaking, however, self-unloader vessel  
16 rates are higher than bulk vessel rates and when  
17 distance is taken into consideration the possibility  
18 of a substantial reduction in the present  
19 transportation charges to destinations west of  
20 Montreal does not appear likely.

21 Further, bearing in mind that the cost of  
22 U.S. coal alongside dock in Toronto is less than the cost  
23 of production in Nova Scotia, the transportation  
24 costs of Nova Scotia coal, no matter what the amount  
25 would make it non-competitive with U.S. coal,  
26 unless subventions were granted to cover the entire  
27 transportation charges (see Table 9). In Table 7,  
28 the cost of U.S. coal alongside dock in Montreal is  
29 shown as \$10.68 per ton and the cost of Nova Scotia  
30







1 coal f.o.b. mine is \$10.72 per ton. Therefore,  
2 even in Montreal for Nova Scotia coal to be competitive  
3 with U.S. coal, the entire transportation cost, whatever  
4 the amount, would have to be absorbed by the  
5 government in the form of subventions to enable  
6 it to compete with U.S. coal. It must be borne  
7 in mind that any decrease in the cost of transporting  
8 coal west on the St. Lawrence River due to the  
9 new Seaway development will, of course, apply  
10 also to the movement of U.S. coal east through the  
11 St. Lawrence.

12 Therefore, it would appear much sounder  
13 economically for Canada to recognize that the  
14 maximum markets for Nova Scotia coal are those  
15 within the area (Montreal and east) and that these  
16 markets can best be preserved by applying subventions  
17 to competition from all other sources of energy as well  
18 as from U.S. coal.

19 I have to point out that merely giving  
20 subsidies to Nova Scotia to allow it to compete with  
21 United States coal is not at all the answer to the  
22 problem with Nova Scotia, because you are simply  
23 subsidizing against their highest cost of energy  
24 source.

25 THE CHAIRMAN: That is assuming that your own  
26 coal will not reduce to competition with oil and gas?

27 DR. POTTER: That is right. We think oil  
28 and gas is going to take most of our coal business  
29 in Quebec except for the limited purpose market we  
30





1 have there.

2 So far as distribution costs of coal in the  
3 western provinces are concerned, there is little  
4 chance of any substantial reductions because those  
5 mines are, in effect, tied to the rails. There are  
6 no water-ways available and distances are too  
7 great to utilize coal pipeline transportation.

8 Reference:

9 (c) "the steps that the Canadian coal  
10 producing industry can take to secure  
11 as large a market as possible for  
12 Canadian coal and to place and maintain  
13 their industry on an economic basis;"

14 There is no question about the problem  
15 confronting the Nova Scotia coal industry. It is  
16 real and it is serious. Of course, if it were  
17 readily susceptible to solution there would have  
18 been no need for this investigation. The Nova Scotia  
19 issue involves a social problem of an uneconomic  
20 industry as it is now constituted.

21 Obviously, if local consumption of coal can be  
22 increased by attracting industries to locate in that  
23 province, the situation would be greatly alleviated.  
24 It is understood that studies have been, and are  
25 presently being made, as to the manner in which this  
26 might be accomplished.

27 Generally speaking, when the U.S. coal industry  
28 loses some of its markets, this usually results in  
29 the closing down of the higher cost mines, such as  
30 would happen in any other industry under similar







1 circumstances. Accordingly, it then becomes  
2 necessary to find employment for the men made idle,  
3 by attempting to attract new industry to locate in the  
4 area where mine closings take place.

5 It may be of interest that in the State of  
6 Pennsylvania, for example, aid is given in securing  
7 new industry, with the State Department of Commerce,  
8 that corresponds with the Provincial Department  
9 of Commerce, furnishing 30 percent of the required  
10 capital, where banking institutions furnish 50 percent  
11 and local effort, in the form of individuals  
12 and other industries in the area, furnish the balance.  
13 The banks take a first mortgage, the state a second  
14 mortgage, and local effort, in effect, a third mortgage.  
15 This plan has worked out very satisfactorily in those  
16 instances where industry itself has not been willing  
17 to put up the initial capital to build or secure  
18 suitable facilities.

19 As stated heretofore, there is little likelihood  
20 that the cost of producing coal in Nova Scotia  
21 can be materially reduced over the next several years.  
22 When it is realized that the cost of the subvention  
23 program to date has amounted to almost 120 million  
24 dollars <sup>(1)</sup>, of which almost 86 millions went to help  
25 Nova Scotia coal, it seems apparent that this is not  
26 the permanent cure for Nova Scotia's coal ills, nor  
27 for any of Canada's coal production troubles.

28 Honourable L.B. Pearson, of the House of  
29 Commons, confirms this conclusion:  
30







1 "I suggest, Mr. Speaker, that encouragement  
2 should be given by the government to the  
3 carrying on of that kind of activity and to  
4 stepping it up to meet the present critical  
5 marketing situation. I know the house will  
6 welcome the increased subventions which the  
7 Prime Minister has mentioned, but that is not  
8 the answer to the difficulties of this  
9 industry. As a matter of fact, Mr. Speaker,  
10 the subventions-- welcome as they are and  
11 perhaps essential as they are at the present  
12 time-- are only stop-gap emergency measures  
13 and are not the long term measures that are  
14 required. Since subventions went into effect  
15 in 1928 the dominion treasury has paid out  
16 \$77½ million for that purpose, yet the coal  
17 industry in Nova Scotia is in the position  
18 in which we find it today. " (2)

11 (1) Dominion Coal Board Report 1958-1959

12 (2) Source: House of Commons Debate, Official  
13 Reports, Tuesday, March 17, 1959.

14 The granting of high subvention payments to  
15 permit Nova Scotia coal to move into Central Ontario  
16 would appear to be a losing proposition and would,  
17 of necessity, continually increase with increased  
18 costs of labor, material, transportation and  
19 capital charges. On the other hand, it is believed  
20 that a greater market potential exists in the  
21 displacement of residual oil in the areas Montreal  
22 and east. This might be accomplished by giving  
23 consideration to the granting of subventions against  
24 residual oil, the end result of which might be  
25 a reduction in the amount of such oil produced in  
26 the refineries located in Montreal and east.

27 I might point out that it is just as foreign  
28 oil as is United States coal; both of them  
29 originate outside Canada.  
30





1           These refineries presently import relatively  
2 lower grade crudes from Venezuela and the Near East,  
3 resulting in a substantial quantity of residual oil  
4 being produced and marketed in competition with coal.  
5 This situation is not unlike that which existed in  
6 the U.S. some years ago, when it was the practice  
7 of some of the U.S. refineries to utilize lower  
8 grade crudes and price the gasoline heating oils  
9 and other higher grade products at high levels  
10 resulting in the disposal of the residual oil at  
11 prices below the cost of the crude plus the  
12 refining cost. Subsequently, other U.S. refining  
13 companies were able to exert enough pressure through  
14 reducing the price of gasoline and other higher  
15 grade products so that it no longer became profitable  
16 to have a substantial quantity of residual oil to  
17 dispose of at a price below the cost of crude. As a  
18 result, U.S. refineries either restricted their  
19 crude oil input to higher grades or installed  
20 catalytic cracking in order to reduce the residual  
21 yield. Whereas, a few years ago the residual yield  
22 of U.S. refineries amounted to 20%, today this is about  
23 12%. In fact, some U.S. refineries produce no residual  
24 oil. The result is the making of more and more  
25 "mobile" products, such as gasoline and diesel oil,  
26 available to the consumer. Further, there were  
27 instances where the delivered price of U.S. coal  
28 forced U.S. refineries to reduce their residual  
29 yields.  
30







1           The reduction in yield of residual oils by  
2 U.S. refineries was followed by increasing imports  
3 of foreign residual oils, especially along the  
4 eastern seaboard of the U.S. However, when the  
5 volume of such imports reached the point where they were  
6 causing undue hardship, not only to the U.S. coal  
7 industry but also to the independent petroleum  
8 producers in the U.S., governmental restrictions  
9 were placed on the quantity of foreign crude and  
10 residual oils permitted to be imported into the U.S.  
11 These restrictions are presently in effect.

12           It is believed that the application of  
13 subventions against residual oil would have the effect,  
14 in a relatively short period of time, of reducing  
15 the amount of residual yield and would, in time,  
16 result in more markets for Nova Scotia coal. This  
17 would, of course, result in a greater quantity of  
18 "Mobile" products from these refineries and would  
19 require a lesser amount of foreign crude to be  
20 imported. With an ever increasing population growth  
21 the demand for higher grade oil products in Canada  
22 will increase as a natural consequence.

23           Therefore, the Maritime coal producers should  
24 be authorized to secure additional local markets  
25 for Maritime coals by the granting of subventions  
26 against all competing fuels.

27           Eventually, however, it is believed the  
28 subventions must be withdrawn and home markets  
29 established for a certain volume of Nova Scotia coals,  
30





1 the volume of production to be determined by normal  
2 market expansion.

3 If Nova Scotia production is not to go below  
4 4.2 million tons per year, it can only be done with  
5 continued government assistance, and as pointed out  
6 heretofore, the cost of this continued assistance  
7 must increase.

8 In the second report of the Royal Commission  
9 on Energy, the statement is made that,

10 "Low cost energy has been and will remain  
11 a vital factor in the Canadian economy." (1)

12 Source: Royal Commission on Energy,  
13 Second Report, page 6-34, July 1959.

14 With this in mind, and believing it to be  
15 the concern of this Commission as well, it is  
16 suggested that one method whereby the Canadian  
17 consumer could reap the benefit of low cost energy  
18 would be to have the Canadian Government eliminate  
19 the present import duty applying on U.S. coal for  
20 domestic and steam use.

21 I have tried to point out that coal currently  
22 moving into Ontario is subject to duty of 50 cents  
23 per ton. Its only competition is oil and gas now  
24 produced in Canada. It will have no effect, no bad  
25 effect to keep those other two energy sources in line,  
26 and to deliver to Ontario a lower fuel cost in the  
27 aggregate.

28 In other words, only the Ontario consumer  
29 really is affected by the 50 cent duty currently  
30 imposed by the Canadian Government because its original







1 purpose was to aid the Nova Scotia coal industry  
2 and I have pointed out that the 50 cents insofar as  
3 it is applied in the Province of Ontario means  
4 absolutely nothing insofar as Nova Scotia is  
5 concerned. It is merely a revenue making source.

6 Reference:

7 (e) "such other related matters as the  
8 Commission considers appropriate in  
9 reporting on those specified above."

10 Reference has previously been made to the  
11 Canadian coal dock operator. In general, when faced  
12 with competition from Nova Scotia coals marketed  
13 with government assistance, he has had no competitive  
14 Canadian coals to offer to make up the costly lost  
15 volume. Fair play by the Canadian Government  
16 requires that some consideration be given to a change  
17 in the present procedure of marketing to the end that  
18 the coal dock operator is not penalized as he is  
19 today.

20 By that I mean if a dock operator in Montreal  
21 has enjoyed a business, a coal business, over a  
22 period of time suddenly it is decided that Nova  
23 Scotia can have that coal business, it is taken away  
24 from him as an individual completely by the government  
25 and given to somebody else thereby increasing his cost  
26 of doing business, or possibly it could put him out  
27 of business. We think the Canadian dock operators  
28 are entitled to just a little bit better preference  
29 than that.

30 That is all I have to present, We have tried







1 to follow your terms of reference to the best of  
2 our ability. Thank you.

3 MR. GUNN: No questions.

4 THE CHAIRMAN: That is a very detailed  
5 statement, Doctor Potter, and no doubt you have  
6 touched on many aspects of the question which we  
7 will consider. What would you say about placing  
8 duties on imported fuel oil or putting it on  
9 imported petroleum which becomes fuel oil or  
10 something in the nature of a consumption tax?

11 DR. POTTER: Administratively that is  
12 extremely difficult to administer. It means  
13 continual checking refinery yields, refinery  
14 runs, types of crude and so forth, to see that  
15 everything runs according to regulations.  
16 It is much easier sir from the point of view of  
17 administration to work it with the Nova Scotia coal  
18 producers in the form of subventions rather than  
19 taxes on the other side. I am merely speaking from  
20 an administration point of view.

21 THE CHAIRMAN: That is exactly what I would  
22 like to have your opinion on. Does that have any  
23 tendency on the price on other grades of oil, the  
24 higher levels of oil?

25 DR. POTTER: No, it will not. As a matter  
26 of fact sir, ultimately it will have a tendency to  
27 decrease the price of gasoline because you are  
28 getting the greater yield on your higher grade  
29 products through refineries. That will come about  
30





1 years later. It won't be immediately.

2 THE CHAIRMAN: That is to say it would  
3 compel them to cut deeper into their cutting of  
4 the oil, into the cracking or extraction?

5 DR. POTTER: That is right.

6 THE CHAIRMAN: Any other methods than you have  
7 mentioned been adopted or applied in the United  
8 States in connection with maintaining a proper level  
9 of coal production?

10 DR. POTTER: Yes sir. Our railroads have  
11 just in the past year substantially reduced coal  
12 freight rates to Tidewater destinations where we  
13 have heavy oil competition, with oil from Venezuela  
14 and this has been done by taking the amount of  
15 coal which is subject to this oil competition and  
16 applying a 50 cent lower freight rate on that coal  
17 than on any other coal moved.

18 In other words, there is total discrimination  
19 at the point of delivery as to rail rates with the  
20 consumer. Let us say a steel manufacturer located  
21 in Baltimore - and there is such a case - pays  
22 50 cents a ton higher for the same coal than does  
23 the Public Utility located in that area who is  
24 subject to oil competition. They have the same  
25 coal going over the same rail route.

26 THE CHAIRMAN: It is justified by the  
27 existence of the other competition?

28 DR. POTTER: That is correct sir, and we  
29 have our railroads do that sir.  
30







1  
2 THE CHAIRMAN: What about the social effect  
3 of the closing down of the mines in the United States?

4 DR. POTTER: It is very difficult and it  
5 is horrible in some instances where -- and I am  
6 speaking now with respect to places I know in the  
7 United States -- in certain inland areas, such as  
8 East Kentucky where there are no other raw materials,  
9 no other industries and long transportation charges  
10 on bringing raw materials in, those coal areas  
11 have just about gone out of business.

12 There is actual suffering. There is  
13 actual want and there is actual hunger in those  
14 particular areas. In other areas, such as we will  
15 say, Pennsylvania - Pennsylvania is a richer state  
16 and it has been able to take care of its  
17 displaced people, displaced miners much better. In  
18 other words, it has gone out to try to do something  
19 about it, so we go from something that is pretty  
20 good to something that I am ashamed of.

21 That is where we have displaced miners and  
22 we haven't taken care of those men in any way shape  
23 or description. They get six months' unemployment  
24 compensation, roughly \$30.00 a week, and then they  
25 are finished.

26 THE CHAIRMAN: My information is that during  
27 the past well twenty-five years your total production  
28 has ranged between 600, at the peak something over  
29 700 million tons to 1958, I think was 410 million  
30





1 and that during that period the number of men  
2 employed has decreased from approximately 400,000  
3 I think, to under 200,000. I suppose that has taken  
4 place generally throughout the coal producing regions?

5 DR. POTTER: No sir, that has taken place  
6 primarily in Pennsylvania and in Eastern Kentucky.  
7 The states of Illinois, Indiana and West Kentucky  
8 have had practically -- they have almost the same  
9 number of men that they had a few years ago. They  
10 were the first mechanized mines in the United  
11 States. Their labor displacement was absorbed very  
12 quickly. With Virginia, up until about two years  
13 ago, has been an expanding coal production area and  
14 only Kentucky, East Kentucky and Pennsylvania  
15 have been the states that substantially declined  
16 so our greatest displacement of men have been in  
17 those two particular areas. West Virginia has  
18 actually lost man-power recently so the great bulk  
19 of these miners actually came from those two  
20 states and that is why I use those two last examples.  
21 The displacement in other areas is of no great  
22 matter or concern to the communities or to the  
23 government because they were minor industries in  
24 those areas at the start.

25 THE CHAIRMAN: Any questions?

26 (No reply)

27 Thank you Doctor Potter for a most illuminating  
28 discussion.  
29  
30



# Appendix A

## Population of Canada, by Provinces and Territories (Thousands)

Year	New found- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatche- wan	Alberta	British Columbia	Yukon and Northwest Terri- tories	Total
1947	337	94	615	488	3,710	4,176	739	836	825	1,044	24	12,888
1948	344	93	625	498	3,788	4,275	746	838	854	1,082	24	13,167
1949	345	94	629	508	3,882	4,378	757	832	885	1,113	24	13,447
1950	351	96	638	512	3,969	4,471	768	833	913	1,137	24	13,712
1951	361	98	643	516	4,056	4,598	776	832	939	1,165	25	14,009
1952	374	100	653	526	4,174	4,788	798	843	973	1,205	25	14,459
1953	383	101	663	533	4,269	4,941	309	861	1,012	1,248	25	14,845
1954	395	101	673	540	4,388	5,115	823	873	1,057	1,295	27	15,287
1955	406	100	683	547	4,517	5,266	839	878	1,091	1,342	29	15,698
1956	415	99	695	555	4,628	5,405	850	881	1,123	1,399	31	16,081
1957	426	99	702	565	4,758	5,622	860	879	1,160	1,487	31	16,589
1958	438	100	710	577	4,884	5,803	870	888	1,201	1,544	33	17,048
1959	449	102	716	590	4,999	5,952	885	902	1,243	1,570	34	17,442
1961												17,700 (E)
1965												19,517
1970												21,643
1975												23,989

Source: Dominion Bureau of Statistics, 1947 - 1959 (E) Estimated.  
Hood and Scott-"Output, Labour and  
Capital in the Canadian Economy"





# Appendix B

## Consumption of Energy in Canada Billions of B.t.u.

<u>Year</u>	<u>Coal</u>	<u>Oil</u>	<u>Gas</u>	<u>Hydro</u>	<u>Total</u>
1947	1,144,707	577,921	38,664	143,463	1,904,755
1948	1,253,567	647,170	48,718	143,936	2,092,391
1949	1,047,316	668,638	53,788	154,519	1,924,261
1950	1,167,243	783,676	65,818	168,659	2,185,396
1951	1,163,291	932,881	84,054	188,902	2,369,128
1952	1,085,366	1,011,450	101,213	202,738	2,400,767
1953	1,004,324	1,123,894	126,182	210,939	2,465,339
1954	850,305	1,195,860	146,755	223,816	2,416,736
1955	872,779	1,372,044	169,538	241,738	2,656,099
1956	957,192	1,561,656	192,972	260,986	2,972,806
1957	842,626	1,556,528	222,293	266,639	2,888,086
1958	627,721	1,543,116	272,768	294,053	2,737,658

## Per Capita Consumption - Thousands of B.t.u.

1947	88,819	44,842	3,000	11,131	147,792
1948	95,205	49,151	3,700	10,931	158,987
1949	77,884	49,723	4,000	11,491	143,098
1950	85,125	57,152	4,800	12,300	159,377
1951	83,038	66,591	6,000	13,484	169,113
1952	75,065	69,952	7,000	14,021	166,038
1953	67,654	75,708	8,500	14,209	166,071
1954	55,623	78,227	9,600	14,641	158,091
1955	55,598	87,402	10,800	15,399	169,199
1956	59,523	97,112	12,000	16,229	184,864
1957	50,794	93,828	13,400	16,073	174,095
1958	36,821	90,516	16,000	17,248	160,585

## Adjusted Per Capita Consumption - Thousands of B.t.u.

1951	29,700	109,800	23,000	18,000	180,500
1955	29,700	112,000	28,000	19,000	188,700
1970	29,700	117,000	32,100	20,500	199,300
1975	29,700	124,300	33,300	22,000	209,300

Source: Dominion Bureau of Statistics  
Canadian Department Mines and Technical Surveys



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Year	Coal and coke		Oil		Gas		Total Fuel MMM Btu	Electricity MMM Btu	Total Energy MMM Btu
	MMM Btu	%	MMM Btu	%	MMM Btu	%			
1947	352,241	72.7	94,383	19.5	37,830	7.8	484,454	22,823	507,277
1948	359,435	72.0	98,495	19.7	41,609	8.3	499,539	25,259	524,798
1949	335,261	68.8	108,657	22.3	43,081	8.8	486,999	28,569	515,568
1950	344,953	64.0	143,086	26.5	51,343	9.5	539,382	33,653	573,035
1951	309,266	57.6	172,765	32.2	55,084	10.3	537,115	38,211	575,326
1952	289,478	53.0	202,211	37.0	54,592	10.0	546,281	42,920	589,201
1953	242,270	46.3	223,793	42.8	57,160	10.9	523,163	48,242	571,405
1954	234,241	40.5	275,546	47.7	67,909	11.8	577,696	54,241	631,937
1955	228,410	37.4	306,600	50.1	76,462	12.5	611,472	61,160	672,632
1956	230,675	34.2	355,407	52.7	88,134	13.1	674,216	67,032	741,248
1957	198,175	29.9	366,386	55.2	98,957	14.9	663,518	74,962	738,480
1958	173,525	26.2	377,000	56.9	112,584	17.0	663,100	79,892	743,001

Source: Dominion Coal Board





Year	Coal and Coke		Oil		Gas		Secondary Electric Power		Total Fuel	Primary Electricity	Total Energy
	MM Btu (1)	% (2)	MM Btu (3)	% (4)	MM Btu (5)	% (6)	MM Btu (7)	% (8)	MM Btu (9)	MM Btu (10)	MM Btu (11)
1947	354,060	77.5	60,030	13.1	23,572	5.2	19,090	4.2	456,752	90,531	547,283
1948	386,314	78.6	69,513	14.2	27,681	5.6	7,861	1.6	491,369	98,109	589,478
1949	365,098	77.5	69,124	14.7	27,349	5.8	9,690	2.0	471,261	104,097	575,358
1950	370,638	76.5	75,580	15.6	28,537	5.9	9,871	2.0	484,626	112,477	597,103
1951	387,544	73.2	98,275	18.6	33,047	6.2	10,703	2.0	529,569	124,893	654,462
1952	376,283	71.8	98,281	18.7	37,080	7.1	12,771	2.4	524,415	132,935	657,350
1953	378,785	71.4	101,065	19.0	38,650	7.3	12,126	2.3	530,626	140,939	671,565
1954	349,544	66.6	124,967	23.8	38,018	7.2	12,601	2.4	525,130	144,099	669,229
1955	390,626	63.4	158,410	24.7	56,468	9.2	10,625	1.7	616,129	155,673	771,802
1956	403,832	60.3	185,600	27.6	70,611	10.5	10,748	1.6	670,791	164,530	835,321
1957	408,382	62.5	172,909	26.4	67,100	10.3	5,466	0.8	653,857	185,540	839,397
1958	348,582	58.9	148,480	25.1	79,245	13.3	15,746	2.7	592,053	189,264	781,317

Source: Dominion Coal Board.



Year	External Combustion Oil		Total MMM Btu (3)	External % (4)	Rly. & Bunkers		Road/air/ Tractor		Internal Combustion		Total Internal MMM Btu (8)	Electricity		Total Energy MMM Btu (10) 678,020
	Coal MMM Btu (1)	MM Btu (2)			Diesel Oil MMM Btu (5)	Gasoline MMM Btu (6)	MM Btu (7)	MMM Btu (9)	MMM Btu (10)					
1947	385,749	51,324	437,073	69.5	9,187	195,781	33,860	238,828	2,119	678,020				
1948	378,000	54,909	432,909	61.8	9,001	218,333	38,025	265,369	2,054	700,332				
1949	350,352	65,186	415,538	58.6	9,843	244,104	38,669	292,616	1,969	710,123				
1950	322,380	72,059	394,439	54.8	11,988	267,231	44,556	323,775	1,979	720,193				
1951	322,272	83,068	405,340	53.1	16,808	293,154	47,328	357,290	1,870	764,500				
1952	298,782	87,998	386,780	48.1	20,777	334,383	60,401	415,561	1,805	804,146				
1953	260,901	86,002	346,903	43.1	23,339	362,428	71,862	457,629	1,706	806,238				
1954	207,225	77,424	284,649	36.7	27,817	379,821	81,507	489,145	1,546	775,340				
1955	185,895	83,300	269,195	33.1	37,973	401,354	103,478	542,805	1,628	813,628				
1956	189,000	93,461	282,461	32.1	46,006	434,678	124,613	605,691	1,621	881,355				
1957	121,500	84,390	205,890	24.7	47,261	440,500	127,600	625,361	1,362	832,613				
1958	64,854	87,000	151,854	18.3	55,100	452,000	133,400	640,500	1,024	793,378				

Source: Dominion Coal Board.



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Year	Coke & Gas Plants									
	Input		Output		Energy Used					
	Coal	Coke, Gas, etc.								
	MMM Btu (1)	MMM Btu (2)	MMM Btu (3)	MMM Btu (4)	Oil MMM Btu (5)	Natural Gas MMM Btu (6)	Other Gas MMM Btu (7)	Total (8)	Electricity MMM Btu (9)	Energy Used MMM Btu (10)
1947	129,612	108,046	21,566	18,667	4,763	1,356	1,692	26,478	3,888	22,590
1948	146,973	121,149	25,824	21,618	5,024	1,740	2,199	30,521	4,502	26,019
1949	145,955	121,831	24,124	26,435	5,738	2,392	2,061	36,626	5,592	31,034
1950	148,381	125,735	22,646	25,779	6,030	5,299	2,170	39,278	6,380	32,898
1951	148,167	127,723	20,444	24,796	6,069	6,514	1,535	38,914	6,472	32,422
1952	156,066	132,664	23,402	30,976	5,859	4,765	1,089	42,689	8,141	34,548
1953	162,651	140,296	22,355	48,300	6,774	6,580	1,202	62,856	13,422	49,434
1954	131,794	114,215	17,579	37,337	7,604	9,585	981	55,507	11,477	44,030
1955	153,649	132,503	21,146	31,903	10,134	13,402	167	55,606	11,713	43,893
1956	165,905	143,055	22,850	41,486	11,391	17,000	167	70,044	14,811	55,233
1957	160,200	137,900	23,300	48,818	11,142	22,126	167	82,253	26,115	56,138
1958	134,200	115,500	18,700	38,366	11,100	23,000	165	72,631	22,174	50,457

Source: Dominion Coal Board.







1 MR. ELLIS: I would like to call upon Mr.  
2 W.A.Vanderburgh who wishes to make a statement, as  
3 a shareholder of Dominion Coal Company. This  
4 statement will become Exhibit number 16 in the record.  
5

6 ---EXHIBIT No. 16: Statement of Mr. W.A.Vanderburgh  
7

8 MR. VANDERBURGH: I would like to particularly  
9 thank the Commission for giving me this opportunity.  
10 I don't know what I can offer technically. After  
11 hearing our American friend, I shall feel very  
12 insignificant. I am not a representative of any  
13 company. I am simply, I suppose, what you would  
14 call a private capitalist.  
15

16 THE CHAIRMAN: You are very welcome here.

17 MR. VANDERBURGH: Well I have an axe to grind.  
18 I happen to be a shareholder of Dominion Steel and  
19 Coal. I also happen to be a beneficiary of an  
20 estate which has half a million dollars in gas  
21 stocks. I mean I only bring this out to mention that  
22 I am not here grinding simply an axe at one end. I  
23 have received a large benefit - at least my father  
24 did by very astute investments in the gas industry,  
25 not in any position, but simply as a very thrifty,  
26 hardworking individual who invested his money in  
27 International Utilities, and particularly in another  
28 gas company in Ontario. International Utilities,  
29 by the way, is an American company.  
30

My father had a great deal of foresight.





1 He followed these companies during a large part of his  
2 life, and I certainly reaped the benefit from what he  
3 has done.

4 Now as I said, I feel very insignificant after  
5 hearing my American friend here give the details on  
6 the problems and on the situation. I have a very  
7 peculiar name. My name is Vanderburgh and it might  
8 be peculiar in that up until very recently - I  
9 would like to bring this up. I think it has a  
10 relationship - that the Americans seem to consider  
11 themselves as "us", more than the Canadians.

12 We seem to consider ourselves as "we" or "I". We  
13 don't seem to stick together. We don't seem to have  
14 continuity and national feeling and I might bring  
15 this up: My family has been five generations in  
16 Canada and my father died without knowing that his  
17 family was sure of the United Empire Loyalists  
18 stock - it is something not taken for granted.

19 We were here. We worked, we had to live. In doing  
20 some research, I found we were five generations in  
21 the United States previous to coming to Canada.

22 THE CHAIRMAN: You are well qualified.

23 MR. VANDERBURGH: A long way back. I am  
24 not getting off the point, I am just trying to say we  
25 were of Dutch descent and actually I grew up in Canada  
26 almost being a foreigner because my name sounded  
27 foreign. My family background, I have done some  
28 looking into it now, and I find that we have lived  
29 already at least ten generations in North America.  
30







1 and I refer to it because my feeling is that in  
2 Canada we don't stick together. We are not Canada,  
3 we are just looking after ourselves. Ontario looks  
4 after itself. The West looks after itself. The  
5 Maritimes looks after itself.

6 I also found out that my people went to the  
7 Maritimes as Loyalists and I found down there a  
8 real loyalty. They went to a great deal of trouble  
9 to give me information of my family which I didn't  
10 have.

11 THE CHAIRMAN: Undoubtedly the finest spot  
12 in the Dominion.

13 MR. VANDERBURGH: I don't know about that  
14 but I know I wrote down there and they said why sure  
15 your people came down here. We will look through  
16 the history books. We will look through the  
17 records office. I have tried to get that  
18 information in Ontario and couldn't get any help  
19 at all even in Queens Park. I couldn't find  
20 anybody that was interested. Now I am just bringing  
21 that up to bring across the fact that as a personal  
22 feeling, Canada doesn't seem to stick together.

23 THE CHAIRMAN: Let's have some suggestions how  
24 it can stick together.

25 MR. VANDERBURGH: I know you have a problem.  
26 I think we have a problem in the Maritimes, in  
27 Alberta. I think if a little help can be given  
28 to help these people - I don't wish to discriminate  
29 against Americans. I think Americans are wonderful  
30





1 looking after Americans. Now I don't know what  
2 can be done, as I said.

3 THE CHAIRMAN: You were a shareholder of  
4 the Company?

5 MR. VANDERBURGH: Yes, I am a shareholder.

6 THE CHAIRMAN: You hold what kind of stock?

7 MR. VANDERBURGH: I hold the preferred stock.

8 THE CHAIRMAN: And what has been the result  
9 over the last few years?

10 MR. VANDERBURGH: Would you like me to  
11 read this, because I have wandered a little bit.

12  
13 STATEMENT BY MR. VANDERBURGH  
14

15 I am a shareholder of Dominion Coal Company-  
16 Preferred and like any one who invests money or labour  
17 I would like a return, since it seems difficult for  
18 this company to earn sufficient profits to pay me I  
19 would like to know why. I believe that, basically,  
20 is the reason for this hearing.

21 The effort of the company seems to have been  
22 sincere, the amount of capital spent on new equipment  
23 substantial and the government help considerable.

24 The preferred shareholders have for a number  
25 of years foregone any dividends whatsoever and the  
26 ability of the investor to liquidate his investments  
27 is done so only at a considerable loss in equity.

28 This is certainly not a pipeline investment  
29 and any government aid has not reached the shareholders  
30







1       whatsoever.

2               The money or help extended has aided the  
3       people of the Maritimes principally in keeping them  
4       employed and making them useful citizens able to  
5       spend money and pay their obligations which include  
6       taxes.

7               My forebears first settled in the Maritimes  
8       as Loyalists, but later moved to Ontario. But the  
9       prosperity of Canada must be National not regional  
10      and the sacrifices of this part of the country  
11      deserves help and consideration.

12              I would like to make it clear that I do not  
13      represent the company, although I have been in  
14      contact with the company and told them I was going  
15      to appear here, and have not been sponsored by anyone.

16              A large user of the coal in the East I believe,  
17      is Dominion Steel and Coal Company, which is the only  
18      Steel Company in Canada using all Canadian labour and  
19      material. If all the steel company's in Canada were  
20      using Canadian coal I believe gentlemen, that there  
21      would be no coal surplus in this country and this I  
22      believe is the solution. If a deficiency payment  
23      plan is used which will allow coal to reach  
24      Hamilton as cheaply as Sydney the flood of American  
25      coal will be slowed with benefit to Canadian Labour  
26      and with a saving of American dollars. The same  
27      program will allow Western coal to reach the Soo  
28      with the same result there and when the Pacific coast  
29      is ready for a basic steel industry the coal will  
30







1 be available immediately.

2 I think that the Steel Company in Hamilton  
3 has a wonderful operation but it is there largely  
4 because they have had protection. They had help.  
5 They wouldn't be there if they didn't have that  
6 tariff at one time. I don't mean now. They  
7 would exist all right today.

8 THE CHAIRMAN: What is your position? When  
9 did you last receive dividends or are they in arrears  
10 at all?

11 MR. VANDERBURGH: Well as to the shares of  
12 Preferred stock, I think they are in arrears almost  
13 \$10.00.

14 THE CHAIRMAN: Well over what period of time?

15 MR. VANDERBURGH: About seven years.

16 THE CHAIRMAN: Seven years?

17 MR. VANDERBURGH: Over seven years.

18 THE CHAIRMAN: What is the rate of interest?

19 MR. VANDERBURGH: Five percent.

20 THE CHAIRMAN: And have you received any at  
21 all for seven years?

22 MR. VANDERBURGH: None at all.

23 THE CHAIRMAN: It is quite obvious that you  
24 expect to get a return.

25 MR. VANDERBURGH: Previously returns were paid.

26 THE CHAIRMAN: How long have you been a  
27 shareholder?

28 MR. VANDERBURGH: Eight, seven or eight years,  
29 I have had some. I followed it an awful long time.  
30





1 I have had Dominion Steel and Coal. My father has.  
2 When I say "I did", either my father or I had stock.

3 THE CHAIRMAN: Do you mean to say that you  
4 have owned these preferred shares only for seven or  
5 eight years?

6 MR. VANDERBURGH: Yes. I am not too old.  
7 Up until a few years ago I didn't have any money which  
8 to invest.

9 THE CHAIRMAN: I just would like to know:  
10 You bought them seven or eight years ago?

11 MR. VANDERBURGH: Yes.

12 THE CHAIRMAN: And you have not received  
13 any returns on them yet?

14 MR. VANDERBURGH: No.

15 THE CHAIRMAN: So you have received nothing?

16 MR. VANDERBURGH: Nothing, and lost a little  
17 capital.

18 The profits of both steel companys in  
19 Hamilton are at an all time high yet both these  
20 plants use chiefly American raw materials.

21 The completion of gas from Alberta is  
22 temporarily hurting the coal industry and this was made  
23 possible by government aid. Surely it is not  
24 unreasonable to allow coal the same privilege. I  
25 believe that the tariff protection and location of  
26 plants aid very substantially the steel plants in  
27 Ontario. Surely a deficiency payment on transporting  
28 coal is a small price in comparison with the sacrifices  
29 that has been made in the Maritimes, and gentlemen  
30







1 remember it will not mean the loss of foreign currency  
2 but is an internal problem which will help keep  
3 Canada prosperous.

4 I also believe that any help should benefit  
5 only the users of coal in Canada and that exported  
6 coal should pay the pit head price plus transportation  
7 out of the Country. I mention this because I believe  
8 the president of one steel company has voiced a  
9 complaint against aid on this basis.

10 I believe also gentlemen that if a little  
11 more aid and support had been given to the Textile  
12 and Mining industries many more job opportunities  
13 would exist to-day in Canada.

14 We cannot have immigrants or more people  
15 in Canada until the job opportunities exist.

16 I bring out the Textile industry because I  
17 come from a town which suffered very materially.  
18 I didn't have any money invested or didn't lose  
19 personally because of the Textile industry, but  
20 there have been seven mills closed down in Hamilton.

21 THE CHAIRMAN: I am afraid our troubles  
22 are great enough with coal.

23 MR. VANDERBURGH: I just brought that out.

24 In reflecting I would like to remind all  
25 the manufacturing and industrial concerns that  
26 have developed since the War that it was Mining,  
27 Coal, Gold etc., and the Textile Industry which  
28 supplied the footing and foundation for Canada's  
29 War Effort and Industrial Post War Growth.  
30





1           How shabbily they have been treated since.

2                       ~~Yours~~ sincerely, W.A.Vanderburgh.

3  
4           THE CHAIRMAN:   Well I think the important  
5 thing is that you are a shareholder, you received no  
6 dividend.

7           MR. VANDERBURGH:   That is correct.

8           THE CHAIRMAN:   You have a preferred share.  
9 That is rather significant of the condition of the  
10 finances of the company.   So that is quite relevant.

11           MR. VANDERBURGH:   I would also think that  
12 any aid that has been given - I don't think it has  
13 gotten back to the people who have invested their  
14 money.   I don't think it is anybody's fault,  
15 particularly.

16           THE CHAIRMAN:   I suppose that would mean that  
17 the Ontario Government would pay your dividends?

18           MR. VANDERBURGH:   Yes.   I don't think any  
19 aid has gone to the investor.   I think that it is  
20 a little bigger issue than just coal; I think it  
21 is an appreciation, and certainly the Maritimes have  
22 supplied a great deal.   I could sell my investment  
23 and take a loss, but I think if, eventually, Canada  
24 is to become a great deal more populated country,  
25 we have to solve these things.   Money seems to be  
26 drawn back to the Southern part of Canada.

27           THE CHAIRMAN:   Thank you, Mr. Vanderburgh.

28           MR. VANDERBURGH:   Thank you very much.

29           THE SECRETARY:   Mr. Commissioner, Mr. C.W.  
30







1 Drake of Algoma Steel Corporation Limited would like  
2 to make a further submission to the Commission.

3 MR. DRAKE: I just want to say a few words  
4 on some of the discussions on the Algoma brief  
5 presented yesterday.

6 One question that had to do with the suggested  
7 advantage we enjoy is with relation to the tariff  
8 treatment on essential coal imports. I do not feel  
9 we should assess this position as being one of  
10 advantage. It is a position of many years'  
11 standing and has long since been considered normal  
12 for the proper growth and development of the Canadian  
13 basic steel industry.

14 Due to Algoma's geographical location, we  
15 are, in effect, at a disadvantage in respect to the  
16 cost of coal with many steel producers in the U.S.A.  
17 It can be stated that Algoma's position with  
18 respect to the cost of coal is an important factor  
19 in the cost of producing iron and steel.

20 I would further like to remark briefly on  
21 some information I gave you relative to the thickness  
22 of seams where we are producing coal. I stated  
23 with reference to coal produced, the high volume  
24 coal produced, that the seams vary from 30 inches to  
25 42 inches, which is substantially correct. I  
26 might add that we are deferring for the most part  
27 the development of the thinner seam coal in  
28 anticipation of the development of more efficient  
29 machinery for its mining. At the same time, we  
30







1 in our Pocahantas mine work seams of a thickness from  
2 42 inches to 60 inches.

3 I would also like to say in respect to our  
4 rather unique position with regards to coal procurement  
5 that it all arrives by water transportation and,  
6 as a result, at the end of a shipping season we have  
7 to have in stock a sufficient quantity of coal to  
8 carry us over the succeeding six- month period.

9 That entails some problems which are not present in  
10 other plants to the same degree; and we have to have  
11 coals which withstand storage for that length of  
12 time. I merely mention that further point with  
13 regard to our problem.

14 THE CHAIRMAN: Anyone care to make any  
15 statements, any remarks?

16 If not, we have dealt with all the submissions  
17 we have received and all those who intimated their  
18 intention to be here.

19 The hearing is adjourned sine die.  
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# ROYAL COMMISSION

ON

## COAL

UNCORRECTED TRANSCRIPT  
Royal Commission on Coal(1959)

## HEARINGS

HELD AT

FREDERICTON  
New Brunswick

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1  
2 ROYAL COMMISSION ON COAL

3  
4 Proceedings of hearings  
5 held in the Students Uni-  
6 versity Centre, Fredericton,  
7 New Brunswick, on March 21,  
8 1960, at 10 a.m.

9  
10 HON. I. C. RAND, Q.C.,

Chairman

11 DR. A. E. CAMERON,

Technical Advisor  
to the Commission

12  
13  
14 COMMISSION COUNSEL

15 Mr. W. A. Gunn, Q.C.

16  
17  
18  
19  
20 Mr. W. Keith Buck

Secretary

21 Mr. J. J. Ellis

Administrative  
Officer





1 MR. ELLIS: Mr. Commissioner, may I call  
2 upon the Honourable Hugh John Fleming, Premier of New  
3 Brunswick, who will present a brief on behalf of the  
4 Government of New Brunswick. This brief will be  
5 recorded as Exhibit number 17 in the records of the  
6 Commission.

7 HONOURABLE MR. FLEMING: Mr. Commissioner  
8 and officials of the Commission, and gentlemen, I would  
9 like to first extend a special welcome to you, Mr.  
10 Justice Rand, in returning to your native province in  
11 an official capacity. It is a great pleasure to  
12 all your fellow citizens to welcome you in any capacity,  
13 and we especially welcome you in an official capacity  
14 this morning. I would like to do so both in a  
15 personal way and on behalf of the people of New Brunswick.

16 Before submitting the brief of the Government,  
17 I would like to make mention and to deplore the un-  
18 fortunate and tragic death of a gentleman. It is  
19 recorded in this morning's newspaper, and it took place  
20 in the Minto coal field this morning, where a man was  
21 tragically killed, leaving a widow and four children.  
22 I am sure everyone here would like me to make this  
23 expression of regret and to also express regrets and  
24 sympathy to his unfortunate wife and family. It seems  
25 to be one of those things that sometimes mar an  
26 occasion of this sort, that we should start with a  
27 tragic example of the dangers inherent in the coal  
28 mining industry.





SUBMISSION OF  
THE GOVERNMENT OF NEW BRUNSWICK

APPEARANCE:

Hon. Hugh John Fleming  
Premier of New Brunswick.

HON. HUGH JOHN FLEMING: I must first, sir,  
officially welcome you to your native province on  
behalf of the Government and people of New Brunswick.  
Doubtless you have met these gentlemen, Professor Smith  
on my right and Mr. Tooke on my left, and Mr. Weir on  
the immediate right of Professor Smith.

Over the years, as the proportionate  
contribution of the Maritime Provinces in terms of goods  
and services to Canada has declined, our proportionate  
contribution in terms of the things of the mind and the  
human spirit has increased. In this latter sphere  
-- as a lawyer, a distinguished judge, and as a  
philosopher of the law -- you have made a great  
contribution to Canadian life. You rank as one of  
our illustrious sons.

We, in New Brunswick, were most pleased when  
you were selected by the Government of Canada to conduct  
an enquiry into the problems of the Canadian coal  
mining industry. The coal industry of the  
Maritime Provinces faces a complex of problems, at the  
present time, and it is reassuring to know that these  
problems are being studied by one who grew to maturity in  
these provinces and has an intimate knowledge of our  
economic circumstances.

In April, 1958, aware of the problems facing  
the provincial coal mining industry, the Government of







New Brunswick appointed a Royal Commission to assess these problems and to make recommendations as to how they might be solved. This Commission has now submitted its report and I am pleased to lay copies of it before you. My remarks, this morning, will, of course, draw heavily from the report of this New Brunswick Royal Commission.

General: Coal has been mined in New Brunswick for more than three centuries. In the entry to his Diary of September 5, 1667, Samuel Pepys indicates a knowledge of the Grand Lake coal area when he refers to: -- "Nova Scotia, which hath a river 300 miles up the country, with copper mines more than Swedeland, and Newcastle coals, the only place in America that hath coals that we know of." Thus the New Brunswick coal mining industry can claim to be the oldest in North America.

Despite these early beginnings, the coal industry in New Brunswick was to be of little importance for another two centuries. By 1887, the industry had gained sufficient importance for production figures to be included in the yearly statistical reports of the federal government. In that year, output was 10,040 tons. By 1905, it had increased to 29,400 tons and production continued to increase until the years immediately after World War I.

In 1922, after the short post-war recession was over, output totalled 267,513 tons, a figure which was not surpassed until more than a decade later in 1933. During the early thirties, to assist the





1 industry in the face of the Great Depression, the  
2 Provincial Government, through its agency the New  
3 Brunswick Electric Power Commission, decided to erect  
4 a thermal power plant at Newcastle Wharf on Grand Lake.  
5 Since that time, the Power Commission has expanded its  
6 generating capacity at Grand Lake and it has become  
7 a major purchaser of New Brunswick coal. At the present  
8 time, its installed capacity at this site is 48,500 k.w.

9 In the early years of World War II, production  
10 increased and, in 1941, was 532,449 tons. After  
11 1941, output declined and in 1945 was only 349,461 tons.  
12 There were many reasons for this decline in production.  
13 The war brought about a movement of labour from the  
14 coal industry, particularly from shaft operations,  
15 to the armed forces and to industries engaged directly  
16 in war production. As a consequence, coal producers  
17 were forced to convert to strip mining on a considerable  
18 scale. In addition to the difficulty of obtaining  
19 labour, New Brunswick mine operators were adversely  
20 affected by wartime control measures. Coal prices  
21 were frozen but wages and other costs continued to  
22 rise. Operators also continued to face discriminatory  
23 freight rates and increased competition in local markets  
24 from Nova Scotia coal. As a result of this situation,  
25 the later years of the war saw the level of output of  
26 the industry little changed from the nineteen-thirties.

27 Since the end of World War II, the New  
28 Brunswick coal mining industry has been marked by  
29 two predominant developments: -- output has risen  
30 sharply and strip mining has become the predominant







1 method of extraction. In 1945, the total output of  
2 the field was 347,601 tons. In 1959, output attained  
3 the record level of 993,801 tons. By 1947, roughly  
4 half of output was produced by shaft mining and half  
5 by strip mining. In recent years, over eighty  
6 per cent of the total output resulted from strip mining  
7 and less than twenty per cent from shaft mining.

8 Strip mining entails the use of larger drag-  
9 lines and relatively small amounts of labour, and thus  
10 production per man-day is much higher than in shaft  
11 mining. In 1959, although 572 men were employed  
12 in stripping and 460 in shaft mining, the ratio of  
13 strip production to shaft production was 4.5 to 1.  
14 Output per man-day in stripping was 5.4 tons and 1.8  
15 in underground production.

16 Coal Reserves: A detailed survey conducted  
17 by the staff of the provincial Department of Lands and  
18 Mines at the request of the Commission, computed  
19 recoverable coal reserves in the Minto area at  
20 approximately 42 million tons. This figure was  
21 compiled primarily from information obtained from the  
22 test-holes of coal companies. Assuming that coal  
23 deposits to a depth of eighty feet can be extracted  
24 economically by strip mining, reserves can be divided into  
25 24.5 million tons which can be recovered by stripping,  
26 and 17.5 million tons which can be obtained by shaft  
27 mining. Possible additional reserves are estimated  
28 at 20 million tons.

29 The Commission has recommended that an effort  
30 be made to keep the output of the field between





1 850,000 and 1,100,000 tons a year. Output below  
2 850,000 tons would create a serious amount of unemployment,  
3 and appreciably above 1,100,000 tons would result  
4 in coal deposits being depleted at too rapid a rate.

5 Production Problems and Mining Methods: At  
6 the present time, the Commission reports that the costs  
7 of shaft-mined coal in the Minto area are relatively  
8 high and the margin of profit is small. In general,  
9 they state that costs of strip-mined coal are substant-  
10 ially lower. As it becomes necessary to utilize  
11 still larger draglines and to remove greater quantities  
12 of overburden to recover deeper coal, the costs of  
13 strip mining will also increase.

14 . In the years immediately ahead, the Commission  
15 reports that New Brunswick coal will be meeting in-  
16 tensified competition from other fuels, primarily  
17 residual oil. Thus it is essential to increase  
18 productivity per man in shaft operations if important  
19 markets are to be retained. Representatives of  
20 Local 7409, the United Mine Workers of America, and  
21 Mr. Victor McMann, a coal producer, requested the  
22 Commission to examine the possibilities of mechanized  
23 shaft mining.

24 At times in the past, mechanized underground  
25 mining had been tried in the Minto area but it has  
26 proved generally to be unsatisfactory. The seam is  
27 thin -- averaging only 18 inches -- and the support  
28 of the roof after the seam has been cut has presented  
29 problems. In recent years, the room-and-pillar method  
30 of shaft-mining has been the only method of underground







1 mining in use in the Minto area. By this method,  
2 coal is extracted basically by handpick and explosives.

3 In 1957, a New Brunswick delegation visited  
4 West Germany to examine methods of thin seam mining.  
5 Members of this delegation reported to the Commission  
6 that conditions in some mines in the Ruhr Valley were  
7 very similar to those in the Minto area and they suggest-  
8 ed that a German mining engineer be brought to New  
9 Brunswick to advise on the possibilities of underground  
10 mechanization.

11 The Commission obtained the services of a  
12 German coal mining engineer who had impressed the New  
13 Brunswick delegation with his knowledge of thin seam  
14 mining when they met him in Germany. This engineer  
15 spent two months in Minto last summer and prepared for  
16 the Commission a comprehensive report on the  
17 possibilities of underground mechanization. He  
18 reported that four of the five shafts then operating  
19 in the Minto area could be mechanized so as to increase  
20 substantially output per man shift.

21 This report is published in full as an  
22 Appendix to the report of the Royal Commission and is  
23 discussed in detail in Chapter III. In September,  
24 1959, Mr. W. P. Dryer, the thermal power consultant  
25 of the New Brunswick Electric Power Commission and an  
26 engineer with considerable experience in coal mining,  
27 studied the report for the Commission and visited  
28 thin-seam mining operations in the Ruhr Valley in West  
29 Germany. Mr. Dryer furnished the Commission with  
30 a most favourable report and this is also published







1 as an Appendix to the Commission's submission.

2 The Commission states that they have given  
3 the matter of underground mechanization intensive study,  
4 have discussed it with a great variety of people with  
5 a knowledge of coal mining in the Minto area, and have  
6 formed the opinion that it has an excellent chance  
7 of opening new possibilities for the New Brunswick  
8 coal mining industry. As a consequence, their  
9 principal recommendation to the provincial government  
10 was:- "That New Brunswick Government co-operate with  
11 the New Brunswick Coal Producers' Association, Local  
12 7409, of the United Mine Workers of America and the  
13 New Brunswick Electric Power Commission in conducting  
14 a trial mechanization operation."

15 I am pleased to inform you, sir, that this  
16 recommendation has been accepted by the Government of  
17 New Brunswick and a trial mechanization programme is  
18 being carried out under the sponsorship of the newly-  
19 formed New Brunswick Development Corporation. A  
20 longwall face will be developed in one of the shaft  
21 mines and two basic types of coal cutting equipment  
22 will be given a thorough trial. We are most hopeful  
23 that mechanization of shaft mines will solve a whole  
24 series of problems:- that working conditions for our  
25 miners will be very greatly improved, that new markets  
26 will be opened for New Brunswick coal, and income and  
27 employment in the Minto area will be more stable than  
28 they have been in the past.

29 If underground mechanization proves to be  
30 economically sound, we are hopeful that it will be





1 instituted, generally, in the Minto area. Thus  
2 some of our producers will doubtless be seeking loans  
3 under the provisions of the Maritime Coal Production  
4 Assistance Act. This legislation has been most  
5 helpful in the past and it certainly fills a basic  
6 need of the Maritime coal industry. We commend  
7 to you the principle of federal financial assistance  
8 to coal producers so that mining methods in these  
9 provinces may be kept efficient and up-to-date.

10 Future Market Trends: Throughout

11 practically the whole of the Western World, coal is  
12 meeting intensified competition from oil. As is  
13 well known, this is due basically to two factors:-  
14 the discovery of new sources of crude oil and economies  
15 in the cost per barrel of moving oil by tankers. As  
16 a result, coal markets in areas adjacent to coastal  
17 waters are becoming increasingly vulnerable. In  
18 Great Britain, the National Coal Board is holding an  
19 enormous stockpile of coal and is cutting back  
20 production. In West Germany, the loss of coal  
21 markets to oil is bringing substantial reductions in  
22 employment in the coal industry. In Nova Scotia, the  
23 problem of markets becomes increasingly serious.

24 In New Brunswick and the Maritimes generally,  
25 the competition of coal versus oil will be sharpened by  
26 the coming into production of a new 40,000 barrel-a-day  
27 oil refinery at Saint John. This, the Commission  
28 suggests in its report, is the general background  
29 which must be taken into consideration in attempting  
30 to assess future trends in the demand for New Brunswick







1 coal.

2 Historically, the New Brunswick coal mining  
3 industry developed to meet the needs of the provincial  
4 economy and 85 to 90 per cent of the total output  
5 has normally been sold within the Province's boundaries.  
6 The major consumers are the pulp and paper companies in  
7 Northern New Brunswick and the New Brunswick Electric  
8 Power Commission. In recent years, substantial  
9 tonnages have been exported to one pulp mill in  
10 Maine and also to pulp mills in North Eastern Quebec.  
11 Thus, a large proportion of New Brunswick coal is sold  
12 to a few larger purchasers and the loss of even one  
13 or two of these markets would have serious repercussions  
14 on the entire industry. Several, of these large  
15 purchasers, located in areas where residual oil can  
16 be brought in by tanker, indicated to the New Brunswick  
17 Royal Commission that they could make substantial savings  
18 by converting from coal to oil.

19 In its report, the Commission states that  
20 the next two years could well be a critical period for the  
21 coal industry. Coal will be meeting intensified  
22 competition from oil, and it is hoped, shaft mines  
23 will be converting to mechanization. After that  
24 time, the situation may well change for the better and  
25 the demand for coal strengthen. This should be  
26 the case if some of the high productivity figures  
27 stated in the report of the Commission's technical  
28 consultant are achieved. This whole subject is  
29 dealt with in detail in Chapter IV of the Royal  
30 Commission's Report and I am only attempting to sketch





1 in the broad outline.

2                   Special Interim Subvention:                   If the trial  
3 mechanization proves successful, it is estimated  
4 that it would take approximately two years for  
5 mechanization to become general in the Minto area.  
6 During this transition period, if there is danger of  
7 coal markets being lost, the Commission recommends  
8 that the Federal Government should be asked to grant  
9 an interim subvention on shaft-mined coal.

10                   The New Brunswick Government believes that  
11 this recommendation is sound and presents it to you  
12 for your consideration.       Once markets are lost  
13 they usually are very difficult to regain and an interim  
14 subvention could preserve markets while our industry  
15 is going through an important phase of adjustment.  
16 The terms of this subvention would have to depend on  
17 the particular situation that arose.       But, I believe  
18 that the principle of a special subvention adequate  
19 to meet the needs of a temporary situation is worthy  
20 of your most careful study.

21                   Subvention Policy and the New Brunswick Coal  
22                   Mining Industry:

23                   Until recently, federal subventions have been  
24 of only minor significance to the New Brunswick coal  
25 mining industry.       Prior to 1957, the largest movement  
26 of New Brunswick coal occurred in the fiscal year  
27 1940-1941 when 59,353 tons of coal received a subvention  
28 of \$42,634.       In the post-war years from 1945 to  
29 1953, the largest annual shipment under subvention was  
30 3,153 tons.       Shipments increased, however, in the







1 next four years and in 1957-1958 and 1958-1959 achieved  
2 record levels. In 1957-1958, 73,095 tons of New  
3 Brunswick coal received subventions of \$120,665 and,  
4 in 1958-1959, 100,532 tons received subventions of  
5 \$161,768. Estimates for the fiscal year 1959-1960,  
6 indicate that in excess of 150,000 tons of New Brunswick  
7 coal will receive subventions of approximately \$290,000.  
8 This will be the largest annual volume of New Brunswick  
9 coal ever moved under subventions.

10 The increased sales to Central Canada, in  
11 recent years, are due primarily to two factors:- (1)  
12 aggressive selling by producers, (2) favourable subvention  
13 rates. The bulk of the increased sales have been  
14 in the areas in Quebec where subvention rates accurately  
15 reflect the difference in cost between New Brunswick  
16 coal and imported coal.

17 I should now like to refer to this second  
18 factor. Since Federal coal subventions were  
19 first adopted in 1928, the basic aim has remained  
20 unchanged: to make Canadian coal competitive with  
21 American coal in markets in Central Canada. Up until  
22 1959, no attempt was made to establish a subvention  
23 rate which reflected the particular qualities of New  
24 Brunswick coal. Last year, however, when the  
25 regulations governing New Brunswick subventions were  
26 changed to bring them into closer conformity with the  
27 Nova Scotia regulations of 1958, this fact was recognized.

28 New Brunswick coal moving to certain districts  
29 in North Eastern Quebec receives a subvention of  
30







1 forty-five per cent of the freight rate. Nova Scotia  
2 coal moving to the same areas receives thirty-five per  
3 cent. The ten per cent differential reflects the  
4 generally lower quality of New Brunswick coal. It is  
5 certainly in keeping with the established principle of  
6 the subventions:- to make Canadian coal competitive  
7 with American coal in Central Canadian markets.

8 As has been indicated, in the years  
9 immediately ahead, New Brunswick coal will be meeting  
10 intensified competition for markets within the  
11 province. Thus it is essential that the regulations  
12 governing shipments of New Brunswick coal to Central  
13 Canada be as favourable as possible. The principle  
14 established in 1959 as regards New Brunswick coal, must  
15 be recognized in all future changes in subvention  
16 regulations.

17 The Need for Industrial Diversification: The  
18 New Brunswick Royal Commission estimates that approx-  
19 imately 6,000 people in New Brunswick are dependent  
20 on the coal industry for a livelihood. Most of these  
21 people reside in the Minto-Chipman area, where it is  
22 by far the most important employer of labour. Indeed,  
23 the Commission reports that this area is too dependent  
24 on one industry and that an attempt must be made to  
25 bring in new industries. They point out that a  
26 programme of federal fiscal incentives would be of  
27 great assistance to areas like Minto in the Maritime  
28 Provinces, where economic activity is, for all practical  
29 purposes, based on one industry. When a worker  
30 becomes unemployed, due to the lack of industrial





1 diversification, he has little chance of obtaining  
2 alternative employment.

3 Speaking of the Maritime Coal industry, in  
4 general, by which I mean the Nova Scotia coal industry  
5 as well as our own:- "I do not believe that one can  
6 profitably study its problems except in relation to  
7 the Maritime economy considered as a whole. New  
8 policies are needed to stimulate the rate of economic  
9 growth in these provinces so as to open up new industrial  
10 markets for coal and to provide alternative employment  
11 for workers who may be displaced by technological  
12 changes or by one of the periodic declines in the  
13 demand for coal.

14 In both New Brunswick and Nova Scotia, in  
15 recent years, new provincial government agencies have  
16 been created to assist in bringing new industries into  
17 these provinces. Progress has been made but what is  
18 needed is a new policy which will be especially  
19 attractive to businesses and which will accelerate  
20 substantial growth in a short space of time. In  
21 this regard, the Government of New Brunswick has ad-  
22 vocated the institution of special incentives by the  
23 federal government in regard to the taxation of corporate  
24 incomes. This has been done in Canada in the past  
25 and is being done in other countries at the present  
26 time. For example, during the years of adjustment  
27 after World War II, the Government of Canada used  
28 accelerated depreciation to promote industrial  
29 development which it considered to be desirable.

30 In Great Britain, investment allowances,







1 which have enabled firms to write off up to 140 per  
2 cent of the cost of certain types of capital assets,  
3 have been used to stimulate capital investment  
4 considered to be in the national interest. At  
5 the present session of the British parliament,  
6 the Local Employment Act has provided the British  
7 Government with a whole range of incentives by which  
8 new industries can be channelled into areas where  
9 economic growth is retarded and the level of unemployment  
10 is high. Practically every government in Europe  
11 has enacted similar legislation to deal with problems  
12 of local and regional unemployment. In the  
13 United States, the Area Redevelopment Bill has been  
14 before Congress for a number of years and has been  
15 held up, not by matters of principle, but by matters of  
16 detail. Thus, special legislation to assist areas  
17 and regions in Canada where economic growth is retarded  
18 would be nothing novel, precedents can be found in  
19 most of the countries of the Western World.

20 I hope, sir, you do not think that I have  
21 been digressing from the problems of the coal industry.  
22 I do not feel that I have. New policies to accelerate  
23 the general level of economic growth in the Atlantic  
24 Region I believe, are basic to any permanent settlement  
25 of the problems of the Maritime coal industry.

26 Conclusion: In conclusion, Mr. Commissioner,  
27 I should like to point out that while coal mining is,  
28 perhaps, marginal to the economies of other parts of  
29 Canada, it is central to the economy of the Maritime  
30 Provinces. Indeed, looking back to 1867, it played





a large part in our entry to Confederation. In this regard, I should like to quote from the study:-

"British North America at Confederation", prepared for the Rowell-Sirois Commission by Professor Donald G. Creighton of Toronto University:-

"It was not upon protection, but upon geographical position, natural resources and widened markets that the manufacturing interests of the different provinces based their hopes. In the Maritimes these hopes were particularly high. What Tupper called the 'geographical advantages' and 'geological attributes' of Nova Scotia appeared to imply that in the new federation it would play a role comparable to that of Great Britain in world trade, or to that of the New England States in the American Union. 'In fact,' said Tupper in the debates of 1867, 'the possession of coal mines together with other natural advantage, must, in the course of time, make Nova Scotia the great emporium for manufactures in British America.' It was in British industry that Nova Scotians usually discovered the presage of their own success; it was in the United States that New Brunswickers found a forecast of their future industrial development. The manufacturers and mechanics of Saint John believed that they would manufacture for the 'granary' of Canada just as New England manufactured for the





1 wheat-producing western states; and Tilley  
2 found in Pittsburgh a forecast of the indust-  
3 rial future of Saint John. 'It is folly  
4 to say,' declared the Saint John Morning  
5 News, 'that Canada can ever compete with  
6 New Brunswick as a manufacturing country.'

7 It seems evident that the Fathers of  
8 Confederation envisaged a national economy in which the  
9 coal production of the Maritime Provinces would have  
10 a preferred status and be looked upon as the primary  
11 source of supply in the Canadian Confederation.

12 Unfortunately, the Maritime coal mining industry has  
13 not played the role in economic development that the  
14 Fathers of Confederation hoped it would. But its  
15 problems are still of the greatest significance to this  
16 part of Canada.

17 Indeed, I believe that a  
18 satisfactory solution to this problem will involve  
19 broad measures to encourage a much more rapid rate  
20 of economic growth for the Maritime economy as a whole.

21 Economic growth and diversification will both provide  
22 the new markets which the industry so badly needs  
23 and also give it that flexibility which is essential  
24 if an industry is to be responsive to economic and  
25 technological change.

26 I submit, Mr. Commissioner, as Appendix to  
27 this statement, the report of the New Brunswick Royal  
Commission on coal.

28 COMMISSIONER RAND: I would like to have  
29 your expression of opinion on one or two matters which  
30 occurred to me in relation to what you have said.

It is quite true that diversification of industry and the







1 introduction of new industries would be of the utmost  
2 importance, but have any new ideas been suggested as  
3 to how that all could be brought about?

4 HON. MR. FLEMING: The suggested ideas  
5 are in the brief. These are, of course, first  
6 taxation incentive and depreciation allowances.

7 COMMISSIONER MANN: Was not depreciation  
8 introduced for the purpose of transferring war  
9 industry to civil economic activities?

10 HON. MR. FLEMING: Of course it is  
11 difficult for me to express an opinion in that respect,  
12 but I am quite satisfied that something of a similar  
13 nature which apparently is in some parts of Great  
14 Britain at the present time, could have a very  
15 beneficial effect on the establishment of new industry  
16 in connection with the coal industry, because of  
17 course the coal mining industry in certain localities  
18 is the only industry and there is no alternative.

19 COMMISSIONER RAND: It is a very serious  
20 thing. Nova Scotia has a more aggravated condition.

21 HON. MR. FLEMING: No doubt that is true  
22 because their production is so much larger.

23 COMMISSIONER RAND: Yes.

24 HON. MR. FLEMING: Mr. Commissioner,  
25 Professor Smith tells me he has a detailed study of  
26 that particular question of depreciation and taxation  
27 incentives which he would be pleased to make  
28 available to you.

29 COMMISSIONER RAND: Thank you. I remembered  
30 there was a special board that went all over the country





1 dealing with the question of depreciation, but my  
2 understanding was that arose out of the transfer of  
3 industry to production of war material, in order to  
4 get back on the basis that the establishment for war  
5 material would not be available to civil production,  
6 but nothing near the same scope of this depreciation  
7 was allowed.

8 PROFESSOR SMITH: The point we are trying  
9 to make is that accelerated depreciation has been used  
10 in Canada in the past in periods of adjustments, and  
11 in other parts of the world, and we certainly do not  
12 believe this is the only way to do it. There are  
13 many ways.

14 COMMISSIONER MANN: What other ways are there?

15 PROFESSOR SMITH: In Northern Ireland, their  
16 government is stimulating industry by giving a direct  
17 capital grant to any new industry moving into an  
18 area, and this immediately cuts down their fixed  
19 charges.

20 COMMISSIONER MANN: Isn't the thinking today  
21 that every economic unit should become more or less  
22 self-sufficient in industrial production?

23 PROFESSOR SMITH: I do not think, self-  
24 sufficient.

25 COMMISSIONER RAND: Pardon?

26 PROFESSOR SMITH: There is always the  
27 advantage of specialists in international trade and  
28 inter-regional trade.

29 COMMISSIONER RAND: My recollection is  
30 that was one of the last statements of Professor Caines,







1 that it might come to a system in which every country  
2 would not only seem to achieve, but would actually  
3 reach the position where it would be satisfied in  
4 a large measure with its own industrial production.  
5 It might import some of the things it did not have,  
6 but isn't that the trend?

7 PROFESSOR SMITH: I would not think so,  
8 sir, no. I have some acquaintance with the works  
9 of Lord Caines, and he would have accepted this as  
10 second best.

11 COMMISSIONER RAND: It not only looks  
12 as if it might be the ultimate tendency, but it probably  
13 would be as good as any other tendency or any other  
14 form of establishment.

15 PROFESSOR SMITH: The point Lord Caines  
16 made, is if you are in a period of international  
17 unemployment, then you should take measures to diversify  
18 your economy, and this is the best solution towards  
19 the end of international full employment.

20 COMMISSIONER RAND: Do you think that has  
21 any chance?

22 PROFESSOR SMITH: I think generally the  
23 situation since the war has been much more satisfactory  
24 than in the 30's. We have had a high national  
25 level.

26 COMMISSIONER RAND: Have we a high level  
27 of interprovincial trade?

28 PROFESSOR SMITH: This is a difficult  
29 problem. This is the problem of regions. I do not  
30 believe it is sensible to think in terms of labour in





1 Canada being generally mobile nationally. I think  
2 we have to think in terms of an economic policy oriented  
3 to a reasonably balanced rate of growth in Canada as  
4 a whole.

5 COMMISSIONER RAND: What do you mean by that?

6 PROFESSOR SMITH: I think when you have a  
7 situation like we have at the present time where the  
8 per capita income of New Brunswick is 50 per cent of  
9 the per capita income of Ontario, this reveals a degree  
10 of regional imbalance which is undesirable.

11 COMMISSIONER RAND: How will you correct it?

12 PROFESSOR SMITH: We suggest it could be  
13 done by the special measures which have been adopted  
14 in other countries of the world to bring in new  
15 industries.

16 COMMISSIONER RAND: This was a live question  
17 in the last forty years in the Maritimes. I have  
18 always been greatly interested in the subject and the  
19 ideas which could be suggested, and you are speaking  
20 in the same terms today as you were forty years ago.

21 PROFESSOR SMITH: I do not think so, sir.  
22 I think if you look it over carefully you will see that  
23 the regional problem is being given a new approach.

24 COMMISSIONER RAND: I do remember in the  
25 early 20's, this very question, the very hopes were  
26 expressed and the same statements made, we need this  
27 and that. I say "we" because I am one of them, and  
28 yet we have not been able to succeed. It comes to  
29 this question of what are the essential factors in  
30 establishing more diversification of industrial





1 activity? What do you need to start?

2 PROFESSOR SMITH: You need a skilled labour  
3 force and incentive.

4 COMMISSIONER RAND: Is that all you need,  
5 labour force and incentive?

6 PROFESSOR SMITH: No, but what we are  
7 saying is that in other systems, special efforts are  
8 being made. If you look at the unemployment picture  
9 in the United States and Great Britain, the solution  
10 is to channel the industries into areas where the  
11 level of growth is retarded. Surely one learns  
12 something from these other countries.

13 COMMISSIONER RAND: What do you suggest in  
14 a concrete form for New Brunswick?

15 PROFESSOR SMITH: The proposal we have  
16 made to the Federal Government is that we use investment  
17 allowances like they have done in Great Britain, of  
18 140 per cent.

19 COMMISSIONER RAND: Just what does that  
20 mean?

21 PROFESSOR SMITH: It means that if a business  
22 man created an asset which would be worth \$100,000,  
23 he could be allowed the depreciation on the basis of  
24 of it being worth \$140,000.

25 COMMISSIONER RAND: Yes, he would get a  
26 high depreciation for a certain number of years in  
27 relation to his income tax.

28 PROFESSOR SMITH: Yes, and it means that  
29 the earning capacity of that asset would be higher than  
30 it otherwise would be.







1 COMMISSIONER RAND: Earning that for a  
2 number of years until that depreciation wiped out the  
3 original investment?

4 PROFESSOR SMITH: Yes.

5 COMMISSIONER RAND: How many years would  
6 it take in that sense?

7 PROFESSOR SMITH: It would depend upon the  
8 depreciation rate. You also get that depreciation  
9 rate.

10 COMMISSIONER RAND: Do you think that  
11 factor as applied to this province or any province in  
12 the Maritimes will go substantially to giving that  
13 fillip to industrial activity that you would think  
14 is desirable, as we all do.

15 PROFESSOR SMITH: All I can say is, we  
16 have discussed this in some detail with our local  
17 businessmen before preparing this memorandum, and  
18 they certainly felt it would be an incentive.

19 COMMISSIONER RAND: Have you considered  
20 the position -- and this is only by way of comparison,  
21 I am a great believer in considering analogous situations  
22 -- have you considered the position of Maine in  
23 relation to the economy of the United States?

24 PROFESSOR SMITH: Yes.

25 COMMISSIONER RAND: What conclusion have  
26 you arrived at?

27 PROFESSOR SMITH: Of course Maine is a  
28 much more prosperous area than New Brunswick. Its  
29 per capita income is almost double ours.

30 COMMISSIONER RAND: In production of goods?





1 PROFESSOR SMITH: Yes, its production of  
2 goods is much higher and its manufacturing capacity  
3 is much higher.

4 COMMISSIONER RAND: What are they manufactur-  
5 ing, principally?

6 PROFESSOR SMITH: The pulp and paper  
7 industry is highly developed.

8 COMMISSIONER RAND: Is its production higher  
9 than ours?

10 PROFESSOR SMITH: Much higher than ours.

11 COMMISSIONER RAND: Have you considered  
12 that in this report?

13 PROFESSOR SMITH: This report was on the  
14 New Brunswick coal mining industry.

15 COMMISSIONER RAND: Yes, but you have not  
16 touched it.

17 PROFESSOR SMITH: Yes, but there have been  
18 studies made on the whole problem in the Maritimes.

19 COMMISSIONER RAND: If you take Maine as  
20 a whole, it cannot be said to be so much ahead of  
21 New Brunswick.

22 PROFESSOR SMITH: Statistically the per  
23 capita income is almost twice ours.

24 COMMISSIONER RAND: Would you name for me  
25 the outstanding production?

26 PROFESSOR SMITH: Well, their pulp and  
27 paper industry is more highly developed than ours.  
28 They say their tourists trade is worth \$200 million  
29 a year, and then they have a more highly developed  
30 secondary manufacturing sector.







1 COMMISSIONER RAND: Generally what are they?

2 PROFESSOR SMITH: Textiles, electronics,  
3 I can give you some statistics on the Maine economy  
4 which would be surprising.

5 COMMISSIONER RAND: Is their potato production  
6 greater than ours?

7 PROFESSOR SMITH: Yes, about three times  
8 ours.

9 COMMISSIONER RAND: Of course they have very  
10 heavy markets in the New England States to meet at the  
11 back door, and we have not.

12 PROFESSOR SMITH: But the statement is  
13 often made that New Brunswick is no more prosperous  
14 than Maine, and it seems to be supported by the statistics,  
15 sir.

16 HON. MR. FLEMING: You were speaking about  
17 the early 20's. There is one very definite difference  
18 today which does not refer to the coal mining industry,  
19 and that is, of course, the mineral deposits which  
20 have been discovered.

21 COMMISSIONER RAND: Yes, I quite agree,  
22 but I was going to ask you whether you have taken into  
23 consideration the function that coal in New Brunswick  
24 might play, because your reserves here are not great.

25 HON. MR. FLEMING: To the extent, of course,  
26 that coal plays a part in the production of electrical  
27 industries.

28 COMMISSIONER RAND: Not only that, but you  
29 would have the metallurgical aspect in lead.

30 PROFESSOR SMITH: There is a chapter in our





1 report on that.

2 COMMISSIONER RAND: I must say, Professor  
3 Smith, if you would not mind I wish you would give  
4 me what you consider justification for entering upon  
5 a new coal production at a time when the whole western  
6 world is being flooded with oil?

7 PROFESSOR SMITH: I beg your pardon?

8 COMMISSIONER RAND: I wish you would give  
9 me the justification for enlarging your coal production,  
10 because I take it that mechanization would give you  
11 greater production.

12 PROFESSOR SMITH: We suggest the output  
13 from this area is roughly 1 million tons. If we can  
14 produce our top target figure, it would be roughly  
15 1,100,000 tons.

16 COMMISSIONER RAND: Yes.

17 PROFESSOR SMITH: If you can produce  
18 cheaply enough to be competitive with oil, why shouldn't  
19 you?

20 COMMISSIONER RAND: What would be the effect  
21 on the employment of men?

22 PROFESSOR SMITH: We would think the employ-  
23 ment would be maintained at this approximate level,  
24 or a slight decline, but not a very substantial one.

25 COMMISSIONER RAND: Are you familiar with  
26 the results of mechanization in the United States?

27 PROFESSOR SMITH: Yes.

28 COMMISSIONER RAND: They have increased  
29 their capacity of production from 450 to 700 million  
30 tons a year, and they have reduced their working force





1 from over 400,000 to less than 200,000. They have  
2 increased their production from a little over 2 to  
3 over 11 tons, and that has been rather rough on the  
4 individual, hasn't it?

5 PROFESSOR SMITH: Our figure is 1,100,000  
6 tons. The trial is to be carried out and we do  
7 not know what the productivity figures will be.  
8 However when we gave the figure of 1,100,000 tons,  
9 we thought might result from strip-mining, we felt  
10 the volume could be kept from 850,000 tons to 1,100,000  
11 tons. This could happen with a very little reduction  
12 in the labour force. This is because mainly  
13 strip-mining is investment and their productivity is  
14 doubled, and in the shaft mining you would maintain  
15 the labour force.

16 COMMISSIONER RAND: That is to say, your  
17 extended operation underground in terms of men would  
18 approximately counter-balance the production through  
19 mechanization increase in some of your strip-mining?

20 PROFESSOR SMITH: Yes, but not a substantial  
21 decline in strip-mining. Our figure is 1,100,000  
22 tons, and we feel this would not result in any great  
23 decline in labour.

24 COMMISSIONER RAND: Would you say there is  
25 a natural market for an actual reserve of that sort?

26 PROFESSOR SMITH: I think if we could get  
27 it cheap enough to our pulp and paper industries, they  
28 have used it in the past and they will use it in future  
29 as an energy source.

30 COMMISSIONER RAND: What would be the effect







1 of the introduction of competition from the Saint John's  
2 area?

3 PROFESSOR SMITH: We certainly think it  
4 will sharpen the competition for New Brunswick coal.

5 COMMISSIONER RAND: When you are dealing  
6 with industrial development, what will be looked at  
7 primarily will be the economics. There is no place  
8 for sentiment or ethics or anything else. It is  
9 economics.

10 PROFESSOR SMITH: I hope there is always  
11 a place for ethics, sir.

12 COMMISSIONER RAND: You mean frankness and  
13 honesty, you would not go beyond that. You can have  
14 frankness without brutality and ruthlessness.

15 PROFESSOR SMITH: I would hope business  
16 would always be dictated by ethics.

17 COMMISSIONER RAND: But it will be determined  
18 on the basis of economics.

19 PROFESSOR SMITH: Certainly. That is what  
20 we are suggesting.

21 COMMISSIONER RAND: How will you improve  
22 economics with a higher cost of production of your  
23 coal?

24 PROFESSOR SMITH: We are saying that we  
25 hope to lower the cost of production.

26 COMMISSIONER RAND: Do you think without  
27 any assistance that the coal in this province can meet  
28 the oil that is going to be produced in this province?

29 PROFESSOR SMITH: We are hopeful, sir.

30 COMMISSIONER RAND: What is the outlook for





1 the production of power in relation to coal and oil?  
2 What is the outlook for its use for the production of  
3 power?

4 PROFESSOR SMITH: We deal with that in  
5 detail in our submission. The demand for power in  
6 New Brunswick is increasing about 10 per cent per year  
7 compounded, and we think the demand for coal by the  
8 New Brunswick Power Commission after the next couple  
9 of years will be about 150,000 tons a year.

10 COMMISSIONER RAND: Will the production  
11 of electricity by the Commission be met virtually  
12 entirely by coal?

13 PROFESSOR SMITH: No sir, there is extended  
14 power investment on the Saint John's River.

15 COMMISSIONER RAND: I meant in your power  
16 plants, will you be using coal or oil?

17 PROFESSOR SMITH: That decision has not  
18 been arrived at yet, I understand, sir.

19 COMMISSIONER RAND: Have you, in fact, made  
20 any specific estimate of the effect upon the labour  
21 force through the introduction of this mechanization  
22 you have in mind?

23 PROFESSOR SMITH: We have, sir. I can  
24 talk to you about it.

25 COMMISSIONER RAND: Would you mind helping  
26 me out, because I cannot quite get the principle that  
27 will be sufficiently specific to give me much satisfac-  
28 tion. Would you mind pointing out the principle  
29 upon which coal, say from the east, New Brunswick,  
30 Nova Scotia, or anywhere else, should claim to be entitled







1 to go for instance into the Ontario markets?

2 PROFESSOR SMITH: The principle, sir?

3 COMMISSIONER RAND: Yes.

4 PROFESSOR SMITH: It seems to me that  
5 Confederation when we decided to build this country  
6 in the northern part of North America, that it was  
7 in violation of the economic geography of the North  
8 American continent, and we had to adopt certain national  
9 policies. One of these was the policy of tariff  
10 protection which was adopted in the Central Provinces  
11 in 1879. Under this people of the Maritimes have  
12 purchased a considerable portion of their durable  
13 consumer goods from the Central Provinces which could  
14 have been purchased much cheaper in the United States,  
15 cars, television sets, etcetera.

16 COMMISSIONER RAND: Did the leaders in  
17 this part of Canada have that in mind, that they would  
18 be purchasing industrial products from the rest of  
19 Canada?

20 PROFESSOR SMITH: Not when Confederation  
21 was adopted in 1879, but you asked for a justification  
22 of subventions. If you use the tariff to divert  
23 our purchasing power in buying durable goods from the  
24 rest of Canada, there is some case for using a Government  
25 economic policy for them to purchase our coal.

26 COMMISSIONER RAND: I agree. How far  
27 would you carry that?

28 PROFESSOR SMITH: How far would I carry that?

29 COMMISSIONER RAND: Yes, how far would you  
30 carry subventions?





1 PROFESSOR SMITH: I would say this, that  
2 the only way that you could, it would seem to me, limit  
3 the subvention policy ultimately, is if coal cannot  
4 be competitive from this area, to open up alternative  
5 sources of employment in the Maritimes for people who  
6 are going to be displaced.

7 COMMISSIONER RAND: Which do you think would  
8 be sounder policy ultimately?

9 PROFESSOR SMITH: My own feeling is, we  
10 are going to have to develop international policies  
11 for greater diversification in the Atlantic Provinces  
12 and in New Brunswick in general.

13 COMMISSIONER RAND: I quite see considerations  
14 which would lead to that. You can see there is the  
15 principle involved of undefined limits of making this  
16 country one, and I think you realize that you do reach  
17 a point where you must say that this cannot go on.  
18 For instance, we could sell Maritime coal in Winnipeg  
19 or Vancouver if we were prepared to pay the price for  
20 it.

21 PROFESSOR SMITH: I am suggesting, sir, that  
22 the point has arrived when we say, "Let us look at the  
23 alternative policy."

24 COMMISSIONER RAND: I am inclined to say that  
25 seems to be rather sound, and then there is the question  
26 of working it out. I think you have a council  
27 at that work today?

28 PROFESSOR SMITH: Yes.

29 COMMISSIONER RAND: You spoke of Maine and  
30 the income from the tourist trades, is there some thought







1 in the Maritime Provinces, ~~that~~ that might have a very  
2 substantial increase in our well-being?

3 PROFESSOR SMITH: Yes, I think you will find  
4 all the four Governments are making a great effort  
5 to extend tourist trade in this part of the world.

6 COMMISSIONER RAND: Then I think we must  
7 say that so far as the application of the principle  
8 that you have mentioned as to the first goal, it  
9 becomes a question of judgment as to how far can you  
10 carry it. You may reach a point where you are  
11 extending so much in that field, that you are approaching  
12 other possibilities of local activity and local new  
13 life.

14 PROFESSOR SMITH: This is always the  
15 problem you are confronted with in trying to make any  
16 economic policy.

17 COMMISSIONER RAND: Then, as you say, we  
18 have more or less disregarded the economic flow or  
19 economic direction in the structure of Canada. I  
20 would gather from what you say this, that the time  
21 has been reached when we all ought to pay close attention  
22 to the alternative.

23 PROFESSOR SMITH: Yes sir.

24 COMMISSIONER RAND: Has the Government  
25 of the Province directly assisted in any way with the  
26 development of the coal industry of this province?

27 HON. MR. FLEMING: Of course.

28 COMMISSIONER RAND: I think Professor Smith  
29 would be ramiliar with this.

30 PROFESSOR SMITH: At times in the past it has







1 made loans.

2 COMMISSIONER RAND: But nothing in the  
3 way of positive assistance in the matter of subsidies  
4 or anything of that sort.

5 PROFESSOR SMITH: In the early 20's the  
6 programme of developing primary generation on Grand  
7 Lake was developed.

8 COMMISSIONER RAND: Is that power plant  
9 to be continued?

10 PROFESSOR SMITH: It will remain a part  
11 of the system, certainly.

12 COMMISSIONER RAND: Of course, I suppose  
13 you assume that the potential energy wrapped up in  
14 the coal at some time or other will be in demand,  
15 if not today, then tomorrow?

16 PROFESSOR SMITH: Sir, it is demanded  
17 anytime if the competitive price is right.

18 COMMISSIONER RAND: Yes, and I am assuming  
19 it is not generally able to meet the cost of oil, because  
20 that is the general judgment of western Europe and  
21 the United States. But that is a valuable resource?

22 PROFESSOR SMITH: Yes.

23 COMMISSIONER RAND: And therefore it is  
24 only a question until oil, and in some parts of Canada,  
25 gas, reaches a height of cost that brings them within  
26 the range of competitive prices of coal, that the  
27 demand for coal will be made, isn't that so?

28 PROFESSOR SMITH: Yes.

29 COMMISSIONER RAND: It does look in the  
30 west as if it is the purpose to see whether or not we





1 can get rid of our resources in this generation, but  
2 you have to assume that other generations are going  
3 to have need of the resources of the country, as well  
4 as the present one. It would be wiser for any  
5 district, not only New Brunswick, but in Canada and  
6 in any country, to husband its resources until they  
7 can be used economically. Would you agree with  
8 that?

9 PROFESSOR SMITH: I think it is sound, but  
10 I think you have to do this in the context of the  
11 economy generally. Professor Johnson in 1890 wrote  
12 a book in which he stated that Great Britain was  
13 going to run out of coal in a generation, so some  
14 of these predictions are sometimes pessimistic; but  
15 certainly conservation is a point.

16 COMMISSIONER RAND: You know, in minerals  
17 of this sort, we know when they are gone, they are  
18 gone for good. I think it is generally realized  
19 that in the next 35 or 50 years on the knowledge  
20 now available, the possibility is we will have oil  
21 in abundance and gas in abundance. That does not  
22 apply, possibly to New Brunswick and Nova Scotia, but  
23 certainly in the Central Provinces, and it has become  
24 very serious.

25 HON. MR. FLEMING: There is a point in  
26 connection with the use of coal by the New Brunswick  
27 Power Commission. I would just like to bring to  
28 your attention that within the last four or five years  
29 there is a new plant, in addition to the older plant  
30 established 30 years ago at New Castle, which is operated







1 primarily on the use of Minto coal. There is a  
2 second plant there. The point is, it is not just  
3 the same as it was 30 years ago, there is another  
4 plant there and it is a much more up-to-date plant,  
5 of course.

6 COMMISSIONER RAND: I meant to ask Professor  
7 Smith if he had any clear view of the effect of the  
8 introduction in this Province of the manufacture of  
9 residual oil?

10 PROFESSOR SMITH: Yes sir, we have. We  
11 have covered that in the brief.

12 COMMISSIONER RAND: Yes, then that will  
13 be available to us. Thank you very much.

14 MR. ELLIS: I would like to call upon  
15 Mr. H. J. Whalen who will present a brief on behalf  
16 of the A. W. Wasson Company Limited. This brief  
17 will be recorded as Exhibit number 18.

18  
19 ---EXHIBIT NO. 18: Submission of the A. W. Wasson  
20 Company Limited.

21  
22 SUBMISSION OF

23 THE A. W. WASSON COMPANY LIMITED

24 APPEARANCE:

25 Mr. H. J. Whalen

26 MR. H. J. WHALEN: Mr. Commissioner,  
27 officials of the Commission, and gentlemen: Late in  
28 1959 representatives of A. W. Wasson Ltd., who for  
29 some years have been engaged in both strip and deep  
30 mining in the Minto-Chipman field of New Brunswick,





1 were approached by the holder of a coal lease in the  
2 Bras d'Or area of Cape Breton Island, with a view  
3 to ascertaining our interest in undertaking coal strip-  
4 ping operations on his property. The only prior  
5 knowledge which we had of coal resources in Nova  
6 Scotia suitable for mining by stripping methods, was  
7 given to us by Mr. Stephen Dolhanty, district Vice-  
8 President of the United Mine Workers of America,  
9 early in the summer of 1959. Subsequent investigation  
10 of this possibility did indicate, however, that coal  
11 could be efficiently mined by stripping techniques,  
12 and that adequate reserves of merchantable coal were  
13 available. The company thereupon decided to  
14 proceed with stripping operations in the Cape Breton  
15 area, and applied to the Minister of Mines, Province  
16 of Nova Scotia, for permission to commence stripping  
17 operations on the Collins seam, in Bras d'Or. In  
18 a letter to Mr. A. W. Wasson, dated February 12, 1960,  
19 permission to proceed was denied the company by Mr.  
20 E. A. Manson, the Nova Scotia Minister of Mines -  
21 (See Appendix I)'

22 During the initial stages of our inquiry  
23 into the possibility of embarking on strip mining in  
24 Cape Breton, local leaders, particularly local union  
25 officials, repeatedly asserted in public that the  
26 commencement of coal stripping operations, even on the  
27 relatively small scale proposed by our company, would  
28 seriously threaten the already precarious position of  
29 existing underground coal production in Cape Breton.  
30 No doubt the Royal Commission will receive similar





1 representations during its public hearings in Nova  
2 Scotia. The purpose of this brief is to examine  
3 the validity of such contentions, to suggest that they  
4 are founded on conjecture and on questionable assumptions,  
5 and to place on record our conclusions respecting the  
6 feasibility of undertaking strip mining in the  
7 Cape Breton coal fields.

8 We have presented first a few general comments  
9 on the relationship between productivity per man-day  
10 and strip operations as compared with underground  
11 mining, and I do not think in view of the data presented  
12 in the New Brunswick Royal Commission study, there is  
13 much point in labouring this particular point.

14 Productivity in Strip Mining Compared with  
15 Productivity in Underground Mining:

16 The vastly superior efficiency of strip  
17 mining, as compared with underground mining, is too  
18 well known to require an elaborate demonstration.  
19 Comparative production records for Canada indicate that  
20 in coal fields where stripping is carried on exclusively,  
21 such as in Saskatchewan and in some Alberta mines,  
22 output per man-day has recently averaged a level as  
23 high as 26 tons.

24 COMMISSIONER RAND: We have seen that in  
25 Saskatchewan.

26 MR. WHALEN: The comparable ratio in  
27 Nova Scotia's underground mines, on the other hand,  
28 has only recently averaged 2.5 tons. Data presented  
29 in the Final Report of the Royal Commission on the New  
30 Brunswick Coal Mining Industry suggest that, for 1959,  
output per man-day in stripping was 5.4 tons, as against







only 1.8 tons in underground production at the Minto-Chipman coal fields. In New Brunswick mines, stripping methods have gradually displaced underground operations. By 1959, the ratio of strip production to shaft production was 4.5 to 1. In New Brunswick coal fields, moreover, the postwar transition to capital-intensive stripping methods has made possible steady annual increases in productions, employment and income. Throughout the postwar decade 1947-1957, these trends are clearly indicated.

We have included here data for the years 1947 to 1957. We have left out the data for 1948 because this was the beginning of the recession year. It did reflect a decline in the output of the New Brunswick industry, and it was also about this year that the Nova Scotia industry began to experience severe difficulty with regard to its marketing.

Table I: Output, Employment and Income in the New Brunswick Coal Mines, Selected Years 1947-1957.

Year	Output in thousand tons	% of Output mined by strip method	Number in			Index of Average Salaries and Wages Paid
			Labour Force	Strip	Total	
1947	345.2	48.3%	525	334	860	100
1949	540.8	58.2	535	372	907	125
1951	653.4	70.6	517	432	949	152
1953	721.2	72.8	425	497	922	188
1955	877.8	82.0	501	496	977	207
1956	983.5	81.5	505	515	1020	218
1957	976.6	81.5	505	515	1020	235





1 In spite of a decline in output to about  
2 800,000 tons during the recession year 1958, New Bruns-  
3 wick coal production in 1959 is unofficially estimated  
4 at approximately 1,000,000 tons.

5 Notwithstanding short-term market fluctuations,  
6 the long term demand for New Brunswick coal has  
7 steadily grown during the postwar years. This  
8 trend has continued in spite of ongoing competition  
9 with oil for domestic, diesel, and heavy industrial  
10 purposes, and despite the competitive disadvantage of  
11 New Brunswick coal due to its relatively high sulphur  
12 and moisture content. With its lower B.T.U.  
13 rating, and the added disadvantage of much smaller  
14 seams, New Brunswick coal has nevertheless attained  
15 a favourable market situation as a direct result of  
16 stripping, in sharp contrast to the persistent decline  
17 of underground coal mining in Nova Scotia.

18 COMMISSIONER RAND: What is its B.T.U.  
19 rating?

20 MR. WHALEN: I think it is in the order  
21 of 11,500 B.T.U.'s which is considerably lower than  
22 some of the American output, and certainly lower than  
23 the Nova Scotian output. We contend this favourable  
24 situation was achieved and retained as a direct  
25 result of the increase in productivity of the large  
26 and more efficient operations. We would also like,  
27 if we can, to make one point clear about this Minto  
28 coal operation, and that is that it is by and large  
29 restricted to the local market, to the Province of  
30 New Brunswick, and there has been in recent years export







1 to the State of Maine and to eastern Quebec.

2 COMMISSIONER RAND: Is that export subject  
3 to any duty upon entering the United States?

4 MR. WHALEN: I do not think it is.

5 COMMISSIONER RAND: In what condition is  
6 the coal, is it in powder form or what?

7 MR. WHALEN: It is used in the pulp and  
8 paper establishments largely, and it is pulverized coal  
9 for use in their mill operations.

10 Another point in regard to the coal industry  
11 is, notwithstanding the development of the exports in  
12 recent years, many people believe that it is an  
13 industry which is completely subsidized, or that the  
14 market situation with respect to New Brunswick coal  
15 industry is an artificial one in the sense, for  
16 example, that the industry derives its wherewithall,  
17 its markets, solely as a result of special provincial  
18 treatment given to it by public agencies such as the  
19 New Brunswick Power Commission.

20 Although the New Brunswick coal industry  
21 supplies mainly the provincial market, sizeable quanti-  
22 ties are exported annually to Quebec and to Maine.  
23 For 1959, such exports are unofficially estimated to  
24 consume more than 20 per cent of production. Nor  
25 must it be assumed that public agencies in New Brunswick  
26 sustain the local coal industry by providing an arti-  
27 ficial market stability. In 1959, we estimate that  
28 the New Brunswick Electric Power Commission consumed  
29 less than 14 per cent of local coal output, while the  
30 balance was sold to private consumers.





1 I think it would be an unrealistic picture  
2 if the Commission were to give the impression that the  
3 industry is completely sheltered.

4 THE CHAIRMAN: I quite understand that,  
5 but yet you do get subventions on certain of your  
6 shipments?

7 MR. WHALEN: Yes, to the north-eastern  
8 Province of Quebec, for example.

9 THE CHAIRMAN: Do we have the quantity  
10 exported?

11 MR. WHALEN: The quantity of output of  
12 the Minto area of the New Brunswick coal fields during  
13 the years 1947-1957 is indicated in table 1.

14 THE CHAIRMAN: But do you have the quantity  
15 from your own mine? What have you sold outside  
16 of the province in which there were subventions?

17 MR. WHALEN: I have not that figure.

18 THE CHAIRMAN: Perhaps we can get it  
19 from the report of the Dominion Coal Board.

20 MR. WHALEN: The report of the New Brunswick  
21 Coal Commission will have that.

22 THE CHAIRMAN: The Dominion Coal Board  
23 should have those figures?

24 MR. WHALEN: We assume in our brief,  
25 Mr. Commissioner, that 20 per cent of the entire field  
26 is exported, but only 14 per cent of the field is  
27 consumed by the Power Commission.

28 THE CHAIRMAN: What is the prospect, more  
29 or less?

30 MR. WHALEN: The prospect, as I have





1 presented in the New Brunswick Royal Commission report  
2 which is the authoritative document from here on in,  
3 in these matters, is that there is naturally a  
4 dangerous situation approaching with the competition  
5 of oil, which is a matter of some consequence, and this,  
6 in fact, was the motivation of the Government.

7 THE CHAIRMAN: Don't you think we ought  
8 to face the possibility, whatever it may be, rather  
9 than covering it up?

10 MR. WHALEN: I was going to say something  
11 later, after I had presented my brief about this matter  
12 of competition generally between these fuels.

13 I was listening to what you said earlier  
14 to Professor Smith and the discussion about that, and  
15 I think there are a number of things which I would  
16 like to say in addition to what was said, which the  
17 Commission might be interested in hearing.

18 We follow this with a description of the  
19 nature of stripping operations; that is to say, the  
20 types of machines which are used, the output which they  
21 produce in terms of man-days, the changes that are  
22 taking place in strip mining with the application of  
23 larger and larger capital, the development of bigger  
24 machines which allow the operations to be carried on,  
25 and the purpose is to indicate that this is a highly  
26 capitalized type of operation.

27 THE CHAIRMAN: On page 3 you show the  
28 labour force engaged in shaft and strip. Approximately  
29 80 per cent is in strip and 20 per cent in shaft.  
30 Then, you have about the same number of men and the







1 20 per cent of underground operation requires the same  
2 number of men as 80 per cent of strip operations.  
3 As a matter of fact, your stripping operation is not  
4 done by the work of the men at all, the men become  
5 a skilled operator of a machine.

6 MR. WHALEN: Yes. This is the fact of  
7 any kind of technological change, where you begin to  
8 displace labour with capital with more and more  
9 increments. The net result of the transition from  
10 more labour to more capital operation, is a substantial  
11 increase in output per man and it is the *raison d'être*  
12 of the increased capitalization.

13 THE CHAIRMAN: I agree.

14 MR. WHALEN: Even with inferior coal  
15 resources, stripping techniques enable New Brunswick  
16 producers to maintain their markets. The increased  
17 productivity implicit in strip mining is reflected in  
18 lower output costs per unit of input (labour), higher  
19 average remuneration per employee, better conditions  
20 of work, and generally much lower average pithead  
21 prices per ton of coal produced. As compared with  
22 underground mining, the degree to which stripping  
23 operations will lower average coal costs depends to  
24 a large extent on variables such as the slope and thick-  
25 ness of seams, the quantity and composition of over-  
26 burden to be removed, and the levelling of spoil piles  
27 following the extraction of coal -- a process that may  
28 or may not be required under provincial mining regul-  
29 ations. New Brunswick producers are perhaps  
30 fortunate in this latter respect, since mining





1 regulations have not thus far required such levelling.

2 The Report of the Royal Commission on the  
3 New Brunswick Coal Mining Industry deals with strip  
4 mining in Chapter III, Part 1, (pp 51-56). The  
5 use of progressively larger electric-driven draglines  
6 since 1947 has steadily increased the strip ratio,  
7 i.e., the number of yards of overburden which must be  
8 removed in order to produce one ton of coal. In  
9 other words, larger draglines permit working at deeper  
10 pit levels. The largest draglines now in use  
11 can remove, economically, up to 70 feet of overburden,  
12 and can achieve a strip ratio of 41 yards of overburden  
13 removed per ton of coal produced. In addition  
14 to draglines, however, a wide range of mechanical  
15 equipment is used in strip mining: large coal loading  
16 shovels, heavy bulldozers, front-bucket type tractors,  
17 coal transport trucks, and heavy pumps needed to keep  
18 open pits free of water. In the words of the above  
19 mentioned Royal Commission Report: "A medium sized  
20 stripping operation involves expenditures for equipment  
21 approximating half a million dollars; a large  
22 operation might well run in excess of two million  
23 dollars. The labour component is naturally smaller  
24 in these capital-intensive operations than in under-  
25 ground mines. The degree of labour utilization  
26 in current New Brunswick strip mining may be ascertained  
27 from the fact that, at the end of 1959, some 21 dragline  
28 operations, with capacities ranging from 3 to 14  
29 cubic yards, employed rather more than 500 workers.  
30 On the average, therefore, 25 men were required per







1 dragline. This average conceals the fact, of course,  
2 that large dragline units may require a work team of more  
3 than 70 men.

4 THE CHAIRMAN: You have 21 operations in  
5 your own mine?

6 MR. WHALEN: No, this is in the total Minto  
7 area. We are simply trying to get some basic  
8 figure.

9 After our contact with Nova Scotia coal interests  
10 described in Paragraph 1, above, and after our decision  
11 to proceed with strip mining, we proposed to move to  
12 Cape Breton one 3 yard dragline and to follow this with  
13 a 7 yard dragline and several smaller machines. Our  
14 plan, in short, was to mine approximately 150,000 tons  
15 of coal annually, with equipment which would otherwise  
16 be used in New Brunswick, where, because of smaller  
17 seams, perhaps only 100,000 tons could be produced.

18 THE CHAIRMAN: What did you have in mind  
19 as your market for that 150,000 tons?

20 MR. WHALEN: We will deal with that in  
21 a moment.

22 We thus envisaged a relocation of a portion  
23 of our existing operation, rather than an expansion into  
24 the Cape Breton coal field, and the output produced  
25 in the latter area would have been largely offset by  
26 a decrease in New Brunswick output. In order to  
27 carry on the type of stripping we had planned in Cape  
28 Breton, our performance records at Minto suggested a  
29 labour force of between 60 and 70 men, (See Appendix III),  
30 most of whom (90 per cent) would have been local Cape





1 Breton residents. Our estimated monthly operating  
2 costs would have averaged \$50,000, including wages and  
3 salaries, electric power, oil, grease, repairs, parts,  
4 and other miscellaneous supplies.

5 I have given a list of six arguments which  
6 will illustrate the thinking and the objections behind  
7 the union officials.

8 The opposition to our proposed Cape Breton  
9 stripping plans originated with, and was sustained  
10 by, local union officials (U.M.W.) The commencement  
11 of strip mining, they urged, would spell disaster for  
12 the faltering underground mines. In brief, their  
13 arguments were as follows:

14 (a) that stripping of the outcroppings and  
15 near surface seams would make it more difficult  
16 to embark on more extensive underground  
17 extractions when required in future;

18 We understand the stripping operations would  
19 create a drainage problem. The uncovering of the coal  
20 and building up of the piles, which is quite normal  
21 after all stripping operations, would leave large holes  
22 in the ground which would fill with water and  
23 prevent subsequent development of underground operations  
24 in that area, if such was ever to proceed in the future.  
25 They will be prepared to fill up or level the pile  
26 after they have removed the coal. In other words,  
27 level off the ground. Some objection was made  
28 to the company's operations, with regard to this  
29 operation which is the kind of operation which despoils  
30 the countryside.





1 THE CHAIRMAN: There is no doubt it does  
2 in Saskatchewan.

3 MR. WHALEN: It does in all provinces where  
4 the mining regulations do not require the companies  
5 to level off the piles after the company was finished.  
6 However the company undertakes to do this and the  
7 aesthetic argument is hard to sustain. After  
8 stripping is completed, the company will do the  
9 leveling and planting down of these piles with some  
10 kind of greenery.

11 THE CHAIRMAN: What do you consider that  
12 would add to the cost of production?

13 MR. WHALEN: About 5 cents a ton.

14 So the general argument that the development  
15 of stripping would prevent the development of subsequent  
16 underground operations is not a very valid argument.

17 It could also be argued, I suppose, in this  
18 connection that the operation of removing the coal  
19 by stripping from the 40 foot to the 70 foot level  
20 could best be removed by underground operations,  
21 however we have to investigate all the seams for  
22 underground operations, which above the 70 foot level  
23 would be more hazardous.

24 THE CHAIRMAN: What is the slope of the  
25 seam?

26 MR. WHALEN: It is indicated in the  
27 diagram in the appendix.

28 THE CHAIRMAN: Roughly what angle?

29 MR. WHALEN: Ten to fifteen per cent slope.

30 THE CHAIRMAN: In a large scale stripping







1 operation, you eventually have it level in the west.

2 What is it in Minto?

3 MR. WHALEN: It is level in Minto.

4 The second argument put forward by the  
5 objectors was:

6 (b) that crop coal, because it is surfaced  
7 mined, necessarily possesses a high sulphur  
8 content, is subject to a high degree of  
9 spontaneous combustion, and must, therefore,  
10 find a market exclusively in Nova Scotia;

11 This contention is not borne out by the  
12 analysis of the coal which was performed by the  
13 company. In fact the sulphur content of Nova  
14 Scotia coal that could be stripped in this particular  
15 area is one-half to one-third smaller in amount than  
16 the sulphur content of New Brunswick coal. The  
17 company in its operations so far has never experienced  
18 any hazards with respect to the high sulphur content  
19 of New Brunswick coal. It has not repeatedly  
20 caught fire in the transit and caused this kind of a  
21 problem. So that argument regarding the high  
22 sulphur content does not appear to be very substantial  
23 in terms of the analysis of the company in this regard.  
24 In fact, it seems to be the opposite.

25 THE CHAIRMAN: I don't want to interrupt  
26 you, but you must have a licence in order to do this?

27 MR. WHALEN: Quite, sir.

28 THE CHAIRMAN: And it has been refused?

29 MR. WHALEN: It has been refused.

30 THE CHAIRMAN: What do you think this





1 Commission could do in a matter of this sort?

2 MR. WHALEN: We merely present this as  
3 a case study, Mr. Commissioner, to indicate some of  
4 the difficulties that are involved in developing any  
5 kind of substantial increase in productivity as the  
6 result of the introduction of strip mining in  
7 Nova Scotia.

8 THE CHAIRMAN: Do you think the question  
9 is one of the quantity of production, or the quantity  
10 of market ability?

11 MR. WHALEN: We will ultimately get to  
12 this question, as it is the final argument and the  
13 fundamental one, no doubt.

14 THE CHAIRMAN: Would you consider that  
15 the coal industry in the Maritime Provinces as a  
16 single entity is desirable, or do you think each  
17 province should look out for its own?

18 MR. WHALEN: I think, Mr. Commissioner,  
19 that the political leaders in each province will  
20 undertake to assure that each province looks out for  
21 its own. On the other hand, this is a country  
22 which in its development has certainly never been characterized  
23 by strict boundaries around each province with regard  
24 to the movement of traffic and labour, and we must  
25 assume a national market and investors in business  
26 are relatively free at any rate to place their capital  
27 assets where they think they might be most productive.

28 THE CHAIRMAN: What would be your purpose  
29 as a company in reducing your production in New Brunswick,  
30 by starting a new venture in Nova Scotia to the same







1 extent?

2 MR. WHALEN: The answer is that the nature  
3 of the coal seam -- basically the argument is that  
4 the nature of the coal seams in Nova Scotia, being  
5 much thicker on the average than in the Minto area,  
6 and the coal being of a better quality, results  
7 in the fact that the strip ratio is reduced. The  
8 strip ratio is the number of tons of overburden which  
9 must be moved on the average to each ton of coal.

10 THE CHAIRMAN: You have cut the top off  
11 a number of out-croppings?

12 MR. WHALEN: Down to the 70 foot level,  
13 and you recover the coal. We have here some  
14 comparable costs. In the Minto area you require  
15 41 tons of overburden that have to be moved in order  
16 to recover a ton of coal, and it is estimated these  
17 particular seams are more efficient operations.

18 THE CHAIRMAN: To a limited extent. Once  
19 you take the top off, 75 feet, then the remainder must  
20 be obtained by underground workings or not at all.

21 MR. WHALEN: If you are going to continue  
22 in that particular seam, the company estimates there  
23 are a number of possibilities with regard to strip  
24 mining in Nova Scotia. A number of leaseholders  
25 have properties which are susceptible to strip mining  
26 down to the 70 foot level, but I do not know myself,  
27 and I do not think perhaps Mr. Wasson knows, the  
28 extent of this over the province as a whole. But  
29 certainly a number of leaseholders that were interested  
30 in developing strip mining in these areas indicates a





sizeable resource is to be had through strip operations.

Further arguments by unions were:

- (c) that the commencement of stripping would result immediately in the closure of the Greener and Thompson shaft mines nearby;
- (d) that strip mining would employ only 10 men, and that the majority of these would be imported from New Brunswick, whereas, in consequence of stripping, the immediate unemployment of 80 shaft miners would be "caused" and the livelihood of 2,000 shaft miners in the Sydney Northside area "threatened";
- (e) that less than 10 per cent of the coal would be recovered by stripping techniques; and,
- (f) that the output from stripping would be sold generally in competition with shaft-produced Nova Scotia coal, in exclusively local markets, rather than in competition with residual oils in the larger Atlantic region and the Quebec and New England markets.

The general idea which seems to underlie this point is that one takes a look at what is essentially a static and even a declining market, in other words the position with regard to Nova Scotia coal at the present time and in the foreseeable future is one with a declining outlook, and it would be impossible for the Nova Scotia producers to retain their dwindling markets. Any operation which comes into the field and which has greater productivity, such as strip mining







1 would automatically tend to cut into these existing  
2 markets.

3 THE CHAIRMAN: There is another factor  
4 that you are overlooking, which is its ultimate effect  
5 on the miners. It is not the greater productivity,  
6 it is the effect on the human being.

7 MR. WHALEN: This makes certain arbitrary  
8 assumptions; it is based entirely on certain assumptions  
9 regarding the marketing of this coal.

10 THE CHAIRMAN: Isn't it also based on  
11 the number of human beings concerned with the production?

12 MR. WHALEN: The general tendency  
13 and the specific details alleged in the arguments set  
14 forth above, do not, in our opinion, bear any relation  
15 to the facts, and we therefore submit the following  
16 alternative interpretations.

17 With regard to (a), stripping of the out-  
18 croppings can hinder subsequent underground extraction  
19 only by creating a drainage problem, i.e., if the  
20 spoil piles resulting from strip mining are not  
21 levelled after the coal is extracted. As a  
22 condition of our operation, however, we undertook to  
23 level all spoil piles. (See Diagram II). It could  
24 be argued, alternatively, that a portion of the  
25 coal removed by stripping, say coal from the forty to  
26 the seventy foot level, could best be removed by under-  
27 ground operations. Our examination of the coal  
28 seams, and of the composition of overburden in this  
29 area, suggests that shaft operations much above the  
30 seventy foot level might prove hazardous. (See Diagram I)







1 With regard to (b), the facts suggest the  
2 opposite of what is alleged. An adequate sampling  
3 of coal from the seams in question has been carefully  
4 analyzed, the results of which show a sulphur content  
5 less than the average prevailing in the New Brunswick  
6 field. With Minto coal, we have never experienced  
7 shipping hazards from spontaneous combustion, even in  
8 the case of coal shipped to the Quebec market. We  
9 are quite satisfied that the quality of Cape Breton  
10 stripped coal would be superior to Minto coal, and that  
11 it would be easily shipped to our customers outside  
12 Nova Scotia.

13 We suggest that (c) and (d) depend upon  
14 entirely arbitrary assumptions. Both arguments  
15 suggest, indeed, that we would be either unable or  
16 unwilling to compete with residual oil in our traditional  
17 markets outside Nova Scotia.

18 THE CHAIRMAN: You would meet the  
19 competition which the ordinary man is incapable of  
20 meeting?

21 MR. WHALEN: The suggestion in this  
22 brief is that the reduction in the cost of the coal  
23 produced is such that in the opinion of the company,  
24 it makes it possible to compete directly with oil, but  
25 not necessarily to take away from the existing markets  
26 that the Nova Scotia industry has. We figure  
27 the Nova Scotia industries present price at the  
28 pithead is well over \$10 per ton. Somebody suggested  
29 \$12 per ton, but I don't know.

30 THE CHAIRMAN: It is \$10.





1  
2 MR. WHALEN: We figure that a substantial  
3 reduction in the cost of coal may result in certain  
4 other adjustments concerning market behaviour; in  
5 other words, the impact of strip operations on the  
6 employment of people depends upon prior assumptions  
7 concerning what happened in the market.

8 THE CHAIRMAN: Your justification is  
9 simply that you may interfere with the competition  
10 which shaft mining is engaged in at present, but  
11 you would not limit yourself but would take your  
12 market wherever you can get it?

13 MR. WHALEN: I suppose it is a correct  
14 description of how business men behave, but it would  
15 be unrealistic if we did not expect this to happen.  
16 But on the other hand this is a company which has  
17 already operated in the New Brunswick fields and  
18 which already has customers. There are customers  
19 which in the immediate future might be thinking  
20 of converting to oil, but companies are prepared to  
21 continue purchasing coal, provided coal can be offered  
22 at competitive prices. There are other companies,  
23 which have since converted to oil who are prepared  
24 to return to coal provided it can be purchased at  
25 a competitive price.

26 THE CHAIRMAN: You wouldn't say if you  
27 did not get in control of all the out-croppings, you  
28 would have strip mining in Cape Breton.

29 MR. WHALEN: I do not know enough about  
30 this.







1 THE CHAIRMAN: I suppose, and I am just  
2 assuming, that it is possible that the moment you did,  
3 you might have competition in strip mining?

4 MR. WHALEN: It might be possible; I don't  
5 really know the extent of the reserves. I think  
6 there is something there of a substantial basis, which  
7 is sufficient to justify the relocation of at least  
8 part of the company's operations in the Nova Scotia  
9 field. In other words, there is an estimated reserve  
10 which the company feels it could put towards the mining  
11 purposes, in the order of one and one-half million  
12 tons. There has to be some reserve there in order  
13 for the company to say that.

14 THE CHAIRMAN: On that basis, you would  
15 exhaust it in seven or eight years?

16 MR. WHALEN: It might be exhausted, but  
17 this is only the first 70 foot level. There is always  
18 the possibility of utilizing the same seam in under-  
19 ground operations; in fact, the company has indicated  
20 that it might perhaps as an adjunct, begin underground  
21 operations.

22 THE CHAIRMAN: Do you think there would  
23 be an economic justification for opening a new under-  
24 ground seam in Cape Breton?

25 MR. WHALEN: I think so, from the discussion  
26 this morning in regard to the competition between  
27 coal and oil, for example, with other possible competi-  
28 tive fuels and other markets such as in the central  
29 market and western markets. There must be a number  
30 of key variables taken into account. One of the most





1 important quite obviously must be the rate of  
2 technological change that takes place in the mining  
3 industry. You must assume a constant change  
4 in technology.

5 THE CHAIRMAN: In what relation?

6 MR. WHALEN: In the application of the  
7 machinery and the development with higher productivity  
8 per man. In the United States, it is quite true  
9 that there has been a decline in the labour force.  
10 It is true there has been a decline of about one-  
11 quarter in the total actual output between 1948 and  
12 1958.

13 THE CHAIRMAN: Which is due to the falling  
14 off of the demand?

15 MR. WHALEN: Due to the falling off of the  
16 demand, but it is also possible to argue, I think,  
17 as in fact Mr. John L. Louis suggests in a recent  
18 article in the Reader's Digest that the output per  
19 man is attempting to get up to the level of almost  
20 40 tons, whether it is by strip mining or by other  
21 underground techniques such as are involved in the  
22 new German equipment. This is a factor which has  
23 to be taken into account in one's judgment concerning  
24 the competitive position of coal as to oil at the  
25 present time. It is possible to argue that oil  
26 costs could be reduced, but one must assume this  
27 technological factor is a very crucial variable.

28 THE CHAIRMAN: There is no doubt that in the  
29 United States they have followed the principle of  
30 utilization of advance mechanical knowledge.







1 MR. WHALEN: Yes.

2 THE CHAIRMAN: It made no difference what  
3 the consequences were.

4 MR. WHALEN: Yes.

5 THE CHAIRMAN: I suppose you must agree  
6 with that if you accept the basic foundation of free  
7 enterprise.

8 MR. WASSON: According to this article  
9 in the Reader's Digest of Mr. John L. Louis, the  
10 founder of the union, he is quite happy about that.

11 THE CHAIRMAN: I agree.

12 MR. WASSON: He goes on to say, "Do you  
13 believe that efficiency must be pushed even if men  
14 lose their jobs? We are not trying to keep men  
15 in the mines to retain jobs."

16 THE CHAIRMAN: I am familiar with that.

17 MR. WHALEN: The substance of the brief  
18 is that in the opinion of this company it would be  
19 possible to conduct strip operations in Nova Scotia.  
20 We do not know to what degree this can be done, because  
21 we have not data as to the total resources which can be  
22 economically mined by strip operations in the coal  
23 fields, but certainly the immediate information  
24 available to the company and its contacts with  
25 Nova Scotia personnel suggest to the company that there  
26 is a possibility that a much more efficient strip  
27 operation can be conducted in the Cape Breton fields  
28 at the present time than exists presently in the  
29 Minto area.

30 It is suggested that if the pithead price at







1 Minto is \$8 and some cents that the same machinery  
2 used in Cape Breton would achieve a substantial  
3 reduction in average costs.

4 THE CHAIRMAN: Let us see what that means.  
5 Do you have out-croppings in Cape Breton?

6 MR. WHALEN: Yes.

7 THE CHAIRMAN: That means that you are at the  
8 cheapest possible strip situation?

9 MR. WHALEN: Yes.

10 THE CHAIRMAN: You have passed that stage  
11 in New Brunswick; you are down to a greater depth.

12 MR. WHALEN: Yes.

13 THE CHAIRMAN: So that it is always more  
14 profitable in strip to start at the outcrop then  
15 when you get down to 75 feet?

16 MR. WHALEN: Yes.

17 THE CHAIRMAN: But you are going down all  
18 the time?

19 MR. WHALEN: Yes.

20 THE CHAIRMAN: And I suppose every mine  
21 in Cape Breton is started from such an out-cropping?

22 MR. WHALEN: Yes.

23 THE CHAIRMAN: Perhaps not every mine,  
24 but in many of them you start with the out-crop and  
25 then you go down the shaft?

26 MR. WHALEN: Yes.

27 THE CHAIRMAN: I quite agree with your views  
28 at that time, but it is only a question of a few  
29 years until you ultimately reach the stage where you  
30 meet the conditions you are now meeting in Minto.





1 MR. WHALEN: You have to understand this,  
2 it is not exclusively a Government setup in Minto.  
3 The intention is that the Government generally see  
4 what can be done with regards to underground mining.  
5 The present Government is going to Germany this week  
6 to look in detail at some of these drum type machines  
7 which perhaps will be introduced to New Brunswick.

8 I know there are some underground techniques  
9 which are highly productive and that may result in  
10 the Nova Scotia coal field, even, in the substantial  
11 increase in output per man hour. Their output  
12 at the present time is just over two and one-half  
13 tons on the average, with more efficient operations  
14 elsewhere. This is reflected in price, which is  
15 a key variable in connection with competition with  
16 oil.

17 THE CHAIRMAN: It has been suggested  
18 the miners in Nova Scotia could profit from the  
19 opening of new pits beginning at the very spot that  
20 you have in mind.

21 MR. WHALEN: Yes.

22 THE CHAIRMAN: They are not unaware of that  
23 possibility.

24 MR. WHALEN: The position of the company,  
25 you will understand, is a rather vulnerable one. We  
26 are faced with a straight answer from the Minister  
27 of Mines who does not have to give reasons for these  
28 things, but we felt it was of some use to put before  
29 the Commission this particular submission, and to  
30 suggest that there is a mere emotional desire on the part







1 of union officials and others not to permit the  
2 beginning of such operations. I think it is fair  
3 to say, perhaps, that this is the result of the rather  
4 difficult situation that the Nova Scotia coal industry  
5 has been faced with. The purpose of the company  
6 is not to commence strip operations today in the area  
7 to add more difficulties to the Nova Scotia coal  
8 industry.

9 THE CHAIRMAN: Don't you think the miners  
10 around Minto would have the same attitude?

11 MR. WHALEN: It is a human trait, it is  
12 admitted. The only point is, in such an area  
13 we should try to look at some of the implications  
14 of possible developments. It has been well known  
15 that in the Nova Scotia coal industry, union leaders  
16 and company officers have talked considerably in the  
17 postwar years about the needs to mechanize, to increase  
18 output, but I also think if you look at the performance  
19 ---

20 THE CHAIRMAN: What you really are proposing  
21 is to take the cream off and leave the skim milk?

22 MR. WHALEN: In what sense is this the  
23 cream?

24 THE CHAIRMAN: The top is the easiest and  
25 the richest, and that is what you want, to skim that  
26 off.

27 Are you going to leave it in  
28 the ground?

29 MR. WHALEN: No, they are very anxious  
30 to start when there will be a market for more production.





1 MR. WASSON: One of the areas where we  
2 propose to strip, has already been mined out. The  
3 lower portion of coal has been mined, and this portion  
4 of coal would be very difficult to get up shafts. The  
5 company say they cannot mechanically shaft mine this  
6 area, so it is coal that just lays there.

7 THE CHAIRMAN: Did you give that represent-  
8 ation to the Honourable Minister of Mines?

9 MR. WASSON: Yes, definitely.

10 THE CHAIRMAN: He must have been hardened.

11 MR. WASSON: There is something else I  
12 would like to say. We shaft mine in the Minto area  
13 a seam of 18 inches, and take our coal away from that  
14 at \$8.25 a ton. I believe, and I am quite convinced,  
15 that with the same type of mine that we have in Minto,  
16 to go down in a seam similar to it and put coal on  
17 the car, we can do it at much less per ton.

18 So we certainly have said in our brief both  
19 here and to the Government that within a year we cert-  
20 ainly will start an underground mining operation and  
21 we believe we can compete with oil, even in an under-  
22 ground operation. It is our intention to start  
23 an underground operation, definitely.

24 MR. WHALEN: All of our output would  
25 displace existing shaft production in local Nova Scotia  
26 markets. In (d), as well, there is a misrepresent-  
27 ation of the number of workers required to sustain  
28 an operation such as we propose. (Cf. Paragraphs 6 and  
29 7, above).

30 The fact alleged in (e), that only 10 per cent







1 of the coal is recovered by stripping, cannot be allowed  
2 to stand. Widely verified observations indicate  
3 that a 90 per cent recovery is common in most strip  
4 mining operations.

5 But the basic position taken by those who  
6 fear and oppose the introduction of strip mining in  
7 Nova Scotia is best represented in (f), the last  
8 argument listed above. Such a position asserts in  
9 effect that if existing markets for shaft mined  
10 coal outside of Nova Scotia were retained, the shaft  
11 output consumed in Nova Scotia would necessarily be  
12 reduced by 150,000 tons annually, that is to say, by  
13 whatever tonnage was produced through stripping. Such  
14 a conclusion, we suggest, misinterprets the present  
15 coal market situation; it can only be valid if it is  
16 assumed that coal prices cannot be substantially reduced,  
17 and that, in consequence, coal markets must contract  
18 indefinitely. Our market surveys show, however,  
19 that coal which is efficiently stripped in Cape Breton,  
20 can indeed compete favourably with residual oil or with  
21 American coal at many inland industrial locations, or  
22 even at some tidewater locations, over a wide geographic  
23 area in Eastern Canada.

24 We interpret this favourable situation as the  
25 result of combining efficient production technology  
26 with adequate coal resources in thick seams suitable  
27 for exploitation through stripping methods. In the  
28 New Brunswick coal field, with its thin seams, the  
29 average cost of coal per ton exceeds \$8.00. By  
30 using the same machinery in Cape Breton, and assuming







1 the same cost structure we believe a substantial  
2 reduction in average cost per ton can be achieved.  
3 Even with the additional extraction costs and the costs  
4 associated with levelling spoil piles, our company is  
5 satisfied that coal can be produced in the Cape Breton  
6 area at a price which compares favourably with oil  
7 and with the coal produced in some eastern United  
8 States mines. Under these circumstances, we cannot  
9 foresee the need to compete with existing shaft mined,  
10 high cost, Nova Scotia coal output. In view of  
11 recent market trends, we wish merely to relocate a  
12 part of our operation in Nova Scotia, which will enable  
13 us to retain our present customers, some of whom threaten  
14 to convert to oil because of the high cost of Minto  
15 coal, and to recapture previous customers which have  
16 already begun using oil. Our aim as coal producers,  
17 in brief, is to maintain our competitive position  
18 with respect to oil, and to supply our customers with  
19 a better product at a much lower price. We have no  
20 intention of adding an additional burden, however  
21 small, to the already overburdened Nova Scotia coal  
22 industry. All of which we respectfully submit.

23 A. W. Wasson, Limited

24 This is all I have to say in this regard.

25 THE CHAIRMAN: We are much obliged to you.

26 The essence of this Commission is frankness, and you  
27 have been very frank and have certainly given ventilation  
28 to these questions. You will understand the  
29 position, I have no doubt. You are meeting all  
30 over the western world the problem of the miners and





1 having their homes rehabilitated. In one particular  
2 area they must find homes for 25,000 miners.

3 MR. WASSON: There is something else I  
4 did not say. There are two areas with 5 million  
5 tons of coal which can be taken by the strip method.  
6 There is something else that really makes me feel  
7 bad. They are going to build a new pulp mill  
8 in Cape Breton and I understand they will burn oil.

9 I am sure if I was an operator in Cape  
10 Breton I would operate at a loss, but that mill would  
11 burn our coal from our own Island.

12 THE CHAIRMAN: It is the juggernaut of  
13 competition. It crushes nearly everything in its  
14 way.

15 MR. WASSON: I think it is a shame. I  
16 think it is possible to dig coal both by shaft and  
17 strip mining to compete with oil. I am sure our  
18 company can go down and shaft mine and sell coal at  
19 a price they would be glad to have it.

20 There is another thing I could say, too.  
21 You must remember that the coal industry is a very  
22 important one in case of war. I can remember a  
23 few years ago when our Power Commission in Minto asked  
24 me to go down one night after supper to get a couple  
25 of loads of coal into the Power Commission at night.  
26 That happened many times.

27 THE CHAIRMAN: That is the reason we must  
28 husband it and keep it.

29 MR. WASSON: You must remember when we  
30 spend our money to buy a gallon of oil, we are sending







1 it off to another country. In buying coal, we  
2 spend our money in our own country.

3 THE CHAIRMAN: I hope you use the same  
4 advocacy in all the provinces of the Maritimes.

5 MR. WASSON: At least we should start  
6 somewhere.

7 THE CHAIRMAN: Yes, why not right here.

8 MR. GUNN: Mr. Whalen, what is your  
9 position in the company, please?

10 MR. WHALEN: I am not in the company.

11 MR. GUNN: I was interested in your remark  
12 regarding where the output could be increased in the  
13 Nova Scotia mines. I am just wondering what  
14 qualification you had to make such a statement, and  
15 if you are qualified, would you mind telling the  
16 Commissioner the scheme whereby the coal could be  
17 produced at a cheaper rate than it is now.

18 MR. WASSON: In our mineral field we have  
19 18 inches of coal; in Cape Breton they have 4 to 6  
20 feet of coal. In the Minto area we have to dig  
21 about 41 cubic yards of earth to get at a ton of coal.  
22 In Cape Breton we have to move about 20 cubic yards  
23 to get at it.

24 MR. GUNN: I thought his ideas were  
25 applicable to the deep mining.

26 MR. WASSON: In the deep mining in the  
27 Minto area we go underground. We have a shaft and  
28 we take out 18 inches of coal. We also have to  
29 take out a few feet of earth to give our men room to  
30 mine coal. In Cape Breton, you only have to take





1 out the coal.

2 MR. GUNN: In your pits, are you two or  
3 three miles from the pit mouth?

4 MR. WASSON: We can go underground. The  
5 cost of going underground is not high. There is  
6 a cost, certainly, but it would not be anything like  
7 the cost of moving mud which you do not get any money  
8 for at all.

9 MR. GUNN: How about the cost of bringing  
10 the coal from the coal face out to the pithead?

11 MR. WASSON: Certainly there is a cost,  
12 but compared to the cost of moving, it is very small  
13 per ton.

14 THE CHAIRMAN: What depths do you reach?

15 MR. WASSON: In the Minto area our shaft  
16 is about 120 feet deep.

17 THE CHAIRMAN: Suppose you went down  
18 2500 feet.

19 MR. WASSON: There would be a larger  
20 cost in hauling. At the present time we have  
21 haulage underground for three-quarters of a mile for  
22 about 15 cents a ton, and it would still not be much  
23 more if we had to haul it even three miles.

24 THE CHAIRMAN: If you start going in from  
25 the west, you get the distance that you think is  
26 economical, and then you start coming from the east  
27 if the seam does not go down too deep.

28 MR. WASSON: But you must remember in the  
29 Cape Breton seam they are going under the ocean four  
30 or five miles, and they have six and seven tons of coal to





1 pay the bill.

2 THE CHAIRMAN: But they are going in and  
3 out all the time, and you have to haul in directions  
4 of 360 degrees.

5 MR. WASSON: Any operator in the Minto  
6 area would certainly trade their position and be happy  
7 to.

8 THE CHAIRMAN: Have you proposed that?

9 MR. WASSON: We are trying our best to get in  
10 there.

11 MR. GUNN: That is with strip mining  
12 primarily.

13 MR. WASSON: We are proposing a shaft  
14 mine after one year. We want to take out a small  
15 amount to get to the right level, and we definitely  
16 propose to go underground.

17 MR. GUNN: Would you suggest, then, that  
18 it is the result of the way that the officials of the  
19 Dominion Coal Company Limited are mining their pits  
20 that is responsible for the high cost?

21 MR. WASSON: I am not suggesting anything.  
22 I am simply telling you what we can do.

23 THE CHAIRMAN: What type of a seam would  
24 it be?

25 MR. WASSON: We propose to go down three  
26 miles under a seam bed.

27 THE CHAIRMAN: You have not done that  
28 yet?

29 MR. WASSON: We propose to. In our own  
30 mine we haul three-quarters of a mile for 15 cents a ton.







1 We cannot see any great difficulty. We might be  
2 wrong, but we certainly would like to have a try at it.

3 MR. GUNN: Another thing I was interested  
4 in, and I will confine my remarks to Mr. Whalen. You  
5 are interested in this strip mining and you have also  
6 mentioned this new pulp concern that is going to be  
7 set up at the Hawkesbury area in Cape Breton. You  
8 have suggested there is a possibility that oil may  
9 be used in that plant.

10 Do I take it that you are anticipating if  
11 you get the licence to strip mine, to sell your coal  
12 to this pulp mill?

13 MR. WHALEN: I did not make this suggestion.  
14 I did not say anything about the pulp mill.

15 MR. WASSON: I did not say we would try  
16 to sell coal there. I said it is a shame somebody  
17 did not sell the coal there.

18 MR. GUNN: Was not the inference behind  
19 what you said to the effect that if you did strip  
20 mine, that you would use the produce from that strip  
21 mine?

22 MR. WASSON: No, I said it could be used.

23 MR. GUNN: Would you make a bid for it?

24 MR. WASSON: Yes, I think we would if we  
25 had a permit for it down there.

26 MR. GUNN: Would not that be operating  
27 as against the coal produced by the Dominion Coal Company?

28 MR. WASSON: I do not think so, because I  
29 talked to a salesman for the Dominion Coal Company  
30 and he told me he had already been to see the company





1 and he certainly could not compete because oil had  
2 the preference.

3 MR. GUNN: Who was that man?

4 MR. WASSON: I met him on the plane from  
5 Sydney to Halifax.

6 MR. GUNN: What is his name?

7 MR. WASSON: I do not know his name, but  
8 he told me he was a salesman for the Dominion Coal  
9 Company and he sold coal in Halifax.

10 MR. GUNN: Who is this holder of the coal  
11 lease in Bras d'Or area in Cape Breton Island that  
12 you were dealing with in the first instance?

13 MR. WHALEN: I do not know who the holder  
14 of the lease is.

15 MR. WASSON: I did not get the question.

16 MR. GUNN: On page 1 in the introduction  
17 of your submission you state you "were approached by  
18 the holder of the coal lease in the Bras d'Or area  
19 of Cape Breton Island with a view to ascertain our  
20 interest in undertaking coal stripping operations on  
21 his property".

22 My question was, who is the holder of that  
23 coal lease?

24 MR. WASSON: Mr. McCurdy. He called  
25 our office.

26 MR. GUNN: Is that Harry McCurdy?

27 MR. WASSON: Right.

28 MR. GUNN: From Sydney?

29 MR. WASSON: Yes.

30 THE CHAIRMAN: He considers you have the







1 equipment and he has not. Would it amount to that?

2 MR. WASSON: Yes, I suppose. I do not  
3 know.

4 MR. GUNN: What area was he dealing with?  
5 How much land?

6 MR. WASSON: It is an area of about a  
7 mile and a half long and there are three seams exposed  
8 at the surface.

9 MR. GUNN: Where is it located?

10 MR. WASSON: North Sydney. It starts  
11 from the water at North Sydney and it goes towards  
12 the Bras d'Or area. I think I have a map in my car.

13 MR. WHALEN: It is described as the Collins  
14 seam.

15 MR. WASSON: It is about three miles long.  
16 It is in the area that runs from North Sydney highway  
17 right through behind the park to the bottom road which  
18 takes in a rock seam, a mining seam going across there.

19 MR. GUNN: I was interested in the fact,  
20 perhaps Mr. Whalen can answer this one, that if you  
21 did move into the Cape Breton area for strip mining,  
22 would that mean that you would be curtailing your  
23 New Brunswick venture?

24 MR. WHALEN: I think we made that point quite  
25 explicit. The difference is that the application  
26 of this equipment in the Cape Breton area, given the  
27 difference in the seams and the reserves, means that  
28 whereas a piece of machinery will produce 100,000 tons  
29 at Minto, it could produce 160,000 tons in Nova Scotia  
30 on a different seam. The suggestion was that the





1 company would relocate a portion of its operations;  
2 in other words it would not mean that new equipment  
3 would be bought, but the company's operations would  
4 be extended to take in the Nova Scotia portion. That  
5 portion of the operation used in the Minto field  
6 would be relocated and the increase in production would  
7 be offset by a decrease of 100,000 tons in the Minto  
8 field.

9 MR. GUNN: I was thinking in terms of  
10 man-power. You have so many men employed in the  
11 New Brunswick pits.

12 MR. WASSON: We are also president of a  
13 company that builds roads in New Brunswick, and these  
14 extra men that we have in coal industry, we would  
15 be very happy to take the experienced men in our road  
16 construction. The only ones we hope to take  
17 to Cape Breton would be operators, special operators,  
18 and as fast as we can we would like to educate the  
19 good men of Cape Breton to fulfil these jobs.

20 MR. GUNN: I had in mind the bulk of your  
21 working force in New Brunswick. As a result of them  
22 going down to Cape Breton and taking some of your  
23 equipment there, and some of your key men, would that  
24 mean a loss of employment to the men in New Brunswick?

25 MR. WASSON: No, I told you I would be  
26 very happy to have these men in my construction company.

27 MR. GUNN: Would there be any guarantee  
28 of work for them there?

29 MR. WASSON: I have already told you, I  
30 am president of both companies and I will certainly take







1 those men from our coal mines in New Brunswick and put  
2 them in our road construction programme in New Brunswick.

3 MR. GUNN: How many men would that entail?

4 MR. WASSON: We use from 50 to 75 men  
5 in our road construction along with trucks and tractors.

6 MR. GUNN: And the men who would be un-  
7 employed from the coal fields would go to the other  
8 company?

9 MR. WASSON: Yes, and we would be very  
10 happy to have some miners to put in our mines in Minto.  
11 We have brought them out from Italy and Germany in the  
12 last four or five years and in our New Brunswick  
13 industry we are suffering for men.

14 MR. GUNN: Have you made any representations  
15 in the Cape Breton area for employees from that area?

16 MR. WASSON: We have had letters from  
17 people asking us for jobs, and we have answered them  
18 and told them when we start that we will get in touch  
19 with them.

20 MR. GUNN: Did you get in touch with them?

21 MR. WASSON: We have not started yet, when  
22 we start.

23 MR. GUNN: I was also interested in this.  
24 You say that your application for a licence for strip  
25 mining in Nova Scotia has been turned down at the  
26 present moment. What are your future plans? You  
27 do not know, is that it? Does it look as if the  
28 New Brunswick coal fields, when you close down your  
29 operation, will finish?

30 MR. WASSON: Definitely not.

MR. GUNN: That is all I have to ask.







APPENDIX I.

C O P Y

MINISTER OF MINES

Province of Nova Scotia

Halifax, N.S.  
12 February 1960.

Dear Mr. Wasson:

Please be advised that your application for strip mining operations on the Collins seam in Bras d'Or, Cape Breton has been rejected.

Yours very truly,  
SGD. E.A. Manson,  
E. A. MANSON.

Mr. W. H. Wasson,  
W. H. Wasson Ltd.,  
MINTO,  
New Brunswick.

C.C. Mr. D.C. MacNeil,  
MacNeil, MacNeill & Colborne,  
Dorchester Street,  
SYDNEY, N.S.





APPENDIX II

January 30/60

STATEMENT BY A. W. WASSON, PRESIDENT OF A.W. WASSON  
LIMITED IN CONNECTION WITH THE PROPOSED COAL STRIPPING  
OPERATIONS IN CAPE BRETON:

A few weeks ago, we were asked by the holder of a coal lease in Cape Breton if we would be interested in carrying on a coal stripping operation on his property. Prior to this, the only knowledge which we had of any coal seams in the Cape Breton area which could be stripped was given to D. A. Flower, our office manager, several months previously by Mr. Stephen Dolhanty, vice-president, United Mine Workers of America. A few weeks after the information was given to Mr. Flower by Mr. Dolhanty, Mr. Flower visited the coal fields of Cape Breton and discussed coal stripping with several people, but did not carry on any negotiations with the view of starting coal stripping operations. It was several weeks after this that we received a telephone call from the lease holder, whom we had never met or talked to before. He told us that he had extensive coal leases in Cape Breton and was anxious to do business with us. Consequently, coal strip mining being our primary occupation, we were naturally interested and I made a trip to Cape Breton during the latter part of 1959 to interview the prospective lease holder. This was the first time I made an inspection of the Cape Breton coal seams, and the first time I discussed with any lease holder in Cape Breton the possibilities of stripping coal.

During the past few days, several articles have appeared in the Cape Breton press condemning our action in endeavouring to start a strip mining operation in Nova Scotia. We do not wish to get involved in any newspaper controversy or to have a number of the people of Cape Breton take offense against us before the facts of the







1 present situation are known. Therefore, we feel that we  
2 are definitely entitled to defend ourselves against  
3 malicious attacks by those who are apparently distorting  
4 the facts. Again, I want to emphasize that we were invited  
5 to come to Cape Breton, and that we are not deliberately  
6 trying to force our way in. We believe that a lot of the  
7 people of Cape Breton have been misinformed regarding the  
8 effects of a coal stripping operation. Therefore, we wish  
9 to express our views and also relate some of the effects  
10 which strip mining has had in the New Brunswick coal field.

11 One of the most severe criticisms that one hears in  
12 Cape Breton against stripping is the effect it will have  
13 on the countryside. Mr. Dolhanty was very critical of what  
14 is being done in New Brunswick and what would happen in  
15 Nova Scotia. Here again, the facts have been made known  
16 to the people. It is true that the spoil piles from the  
17 stripping operations in Minto have not been leveled off, but  
18 to date, the Mines Department has not found it necessary to  
19 include this in the Mines Act. Most of the area being  
20 stripped in the Minto area is waste or barren land and there  
21 is very little, if any, merchantable timber growing on the  
22 land which is being stripped.

23 If, and when, the Mines Department finds it necessary  
24 to level off spoil piles, it will be done. Regardless of  
25 what is being done in the minto field, we have agreed that  
26 when we start stripping in Cape Breton, we will level off  
27 all the spoil piles and plant trees on the areas leveled  
28 similar to that which is being done in the coal fields in  
29 the United States. Will this disfigure or improve the  
30 appearance of the countryside?

Strip mining is being carried on today in all countries  
where there are coal seams which can be mined by this method  
and we believe statistics will prove that where strip mining





1 is being carried on in conjunction with underground mining,  
2 the economy of the area is better than where underground  
3 mining only is being carried on.

4 In the New Brunswick coal fields, the stripping method  
5 has done a great deal for the industry. Production in the  
6 field during the year 1937 was approximately 360,000 Tons.  
7 At this time, very little coal was being strip mined.  
8 Approximately one thousand men were employed in the area.  
9 During the early part of the war a number of the coal  
10 operators changed practically their whole operation over to  
11 strip mining. This caused the same cry which is now being  
12 heard in Cape Breton. The coal field would be depleted in a  
13 short time, the countryside ruined, and a large number of  
14 men would be thrown out of work etc., etc.

15 In spite of this, strip mining was introduced in New  
16 Brunswick on a fairly large scale and since the war years  
17 the production has grown steadily from year to year, and  
18 for the year 1959, we believe that the production will be  
19 in excess of one million tons, an all time record for the  
20 field. This has happened in years when coal has been dealt  
21 several severe blows by competitive fuels, and it has been  
22 done with very little financial assistance from either the  
23 Provincial or Federal Governments. I think, if the records  
24 were compared, you would find that for the same period the  
25 Nova Scotia industry has shown a reverse trend. There are  
26 over 1,000 employed in the Minto field at the present time.  
27 As a matter of fact, during the past few years there has  
28 been a shortage of underground miners and many immigrants  
29 have been brought in. This is due, to a large extent, to  
30 miners leaving the pits for more lucrative jobs in strip  
mining where working conditions can be maintained far  
superior to underground. The rate of pay in strip mining  
in the Minto field in comparison with underground mining  
is much higher.







1 The equipment which we propose to move to Cape Breton,  
2 consisting of a 3 yd. dragline and a 7 yd. dragline and  
3 several smaller machines, will mine approximately 100,000  
4 tons of coal per year. Therefore, the production of New  
5 Brunswick should drop by 100,000 tons, and due to the  
6 thicker seams of coal in Cape Breton than in the Minto  
7 Field, the production in Cape Breton should increase  
8 considerably more than 100,000 tons. However, the over-  
9 lying rock and shale in the Cape Breton area being much  
10 harder than that encountered in the Minto area, may reduce  
the yardage which our draglines are capable of moving.

11 As our 7 yd. dragline is now working under contract  
12 in the Minto Field, we cannot move it for a year, but we  
13 can move a 3 yd. dragline to Cape Breton immediately. At  
14 this point we might add that we will start an underground  
15 operation approximately one year after we get our stripping  
16 operation started. The coal, which we will strip mine in  
17 Cape Breton, will be coal which we understand cannot be  
18 mined economically underground due to the nature of the  
19 material overlying the coal and on account of it being  
20 too near the surface. In one of the newspaper articles,  
21 Mr. Dolhanty stated that the coal which we would be mining  
22 is of a high sulphur content and would have to be marketed  
in N. S. We have had samples of the coal analyzed and the  
result does not bear out Mr. Dolhanty's contention.

23 In order to carry on the type of stripping operation  
24 which we are planning for Cape Breton, we will employ  
25 between 60 and 70 men. Except for a few key men, probably  
26 10% of the total, we would employ all local men as it is a  
27 definite advantage to have local employees. The monthly  
28 cost will run from \$40,000 to \$60,000 per month consisting  
29 of wages, electric power, oil, grease, repair parts and  
30 many other miscellaneous supplies. In any of our  
construction projects, it has always been our policy to  
purchase all the supplies which it is possible to obtain







1 from local suppliers. Therefore, a very large percentage  
2 of the cost of a stripping operation in the Cape Breton  
3 area will remain with the people. Can any progressive  
4 thinking person foresee this as a threat to the coal  
5 industry of Cape Breton?

6 APPENDIX III

7 Number of Men Required in a Stripping Operation with  
8 2 Draglines and 2 Tractors Working 3 Eight Hour Shifts

9 6 Operators  
10 6 Oilers  
11 6 Pitmen  
12 6 Tractor Operators  
13 1 Shovel Operator  
14 6 Truck Drivers  
15 4 Clean Up Men  
16 2 Mechanics  
17 1 Mechanics Helper  
18 2 Welders  
19 6 Drillers  
20 2 Explosives Men  
21 3 Pumpmen  
22 1 Service Man  
23 5 Men at Loading Plant  
24 1 Pit Foreman  
25 1 General Foreman  
26 1 Clerk  
27 1 Storekeeper





APPENDIX IV.

STATEMENT BY D. A. FLOWER, OFFICE MANAGER FOR  
A. W. WASSON LIMITED, IN CONNECTION WITH THE PROPOSED  
STRIP MINING OPERATION TO BE CARRIED ON IN CAPE BRETON.

During the past few days, a number of news articles have appeared in the Cape Breton press strongly opposing the coal strip mining operation which our Company is planning to carry out in that area.

Most of the articles seem to have originated from or have been influenced by Mr. Stephen Dolhanty, local Vice-President of United Mine Workers of America. I am at a loss to understand the attitude which Mr. Dolhanty is taking at the present time, as it was definitely due to information which he gave me on several occasions that we became interested in stripping coal in Cape Breton.

Several months ago, Mr. Donhanty was in the Minto area negotiating wage contracts, and while in our office, he very enthusiastically described in detail various areas in Cape Breton where strip mining could be carried on. This was the first time that I learned that there were coal seams in Cape Breton that could be strip mined, as I was always under the impression that the Cape Breton coal seams were very deep and pitched at a steep angle. As strip mining is the primary occupation of our Company, I naturally became very much interested in the information which Mr. Dolhanty gave me, and as he was leaving our office, I told him to locate a good stripping area for us and we would go to Cape Breton and start a stripping operation. He in turn gave me a very cordial invitation to visit Cape Breton and assured me that he would show me around the coal fields.

During the latter part of August 1959, I made a trip to Cape Breton and spent some time in the Sydney area.







1 While there, I visited Mr. Dolhanty at the offices of the  
2 United Mine Workers of America and also made several other  
3 contacts with people familiar with the coal mining area of  
4 Cape Breton. It was shortly after this that I received  
5 a telephone call from a leaseholder in Cape Breton who had  
6 learned that we were interested in the coal areas in Cape  
7 Breton, and he was anxious for us to start a stripping  
operation on his property.

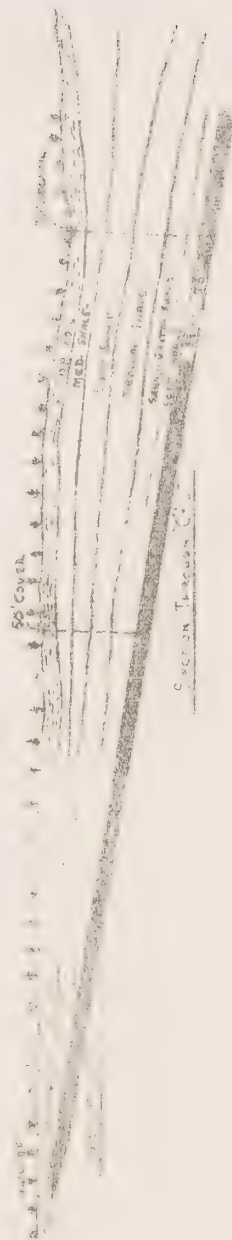
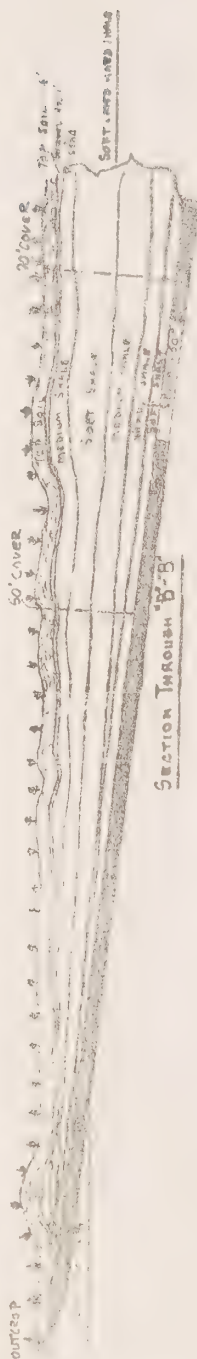
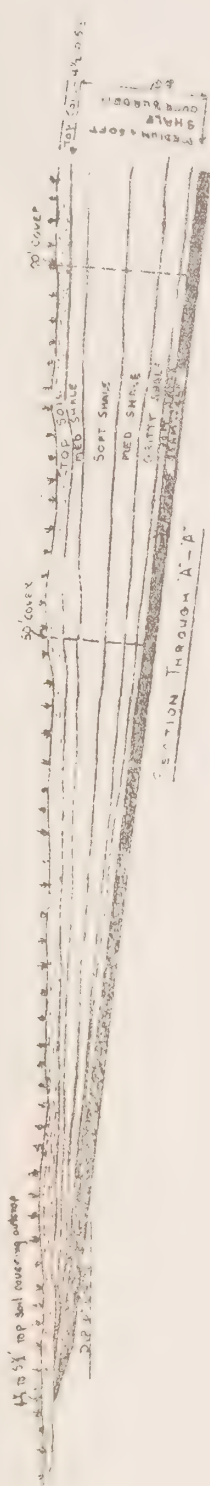
8 During the latter part of November 1959,  
9 Mr. Dolhanty and Mr. Morrison of the United Mine Workers  
10 were in our office and Mr. Dolhanty again seemed  
11 very anxious to discuss strip mining in Cape Breton.  
12 He stated that while he and Mr. Morrison were driving  
13 from Cape Breton to New Brunswick, they had discussed  
14 various places where strip mining could be carried on  
15 in Cape Breton. He described the outcrop of one particular  
16 seam in glowing terms and to use his own words, he stated  
17 that: "It extended as far as the eye could see." I cannot  
18 understand now why Mr. Dolhanty, in such a short time, has  
19 become so opposed to strip mining coal in Cape Breton.  
20 I was of the opinion that he was anxious to get strip  
21 mining started, and it was due to the information which  
22 he gave me that I became interested in having our Company  
start a strip mining operation in Cape Breton.

23 Minto, N.B.

24 January 30, 1960.  
25  
26  
27  
28  
29  
30



Diagram I.

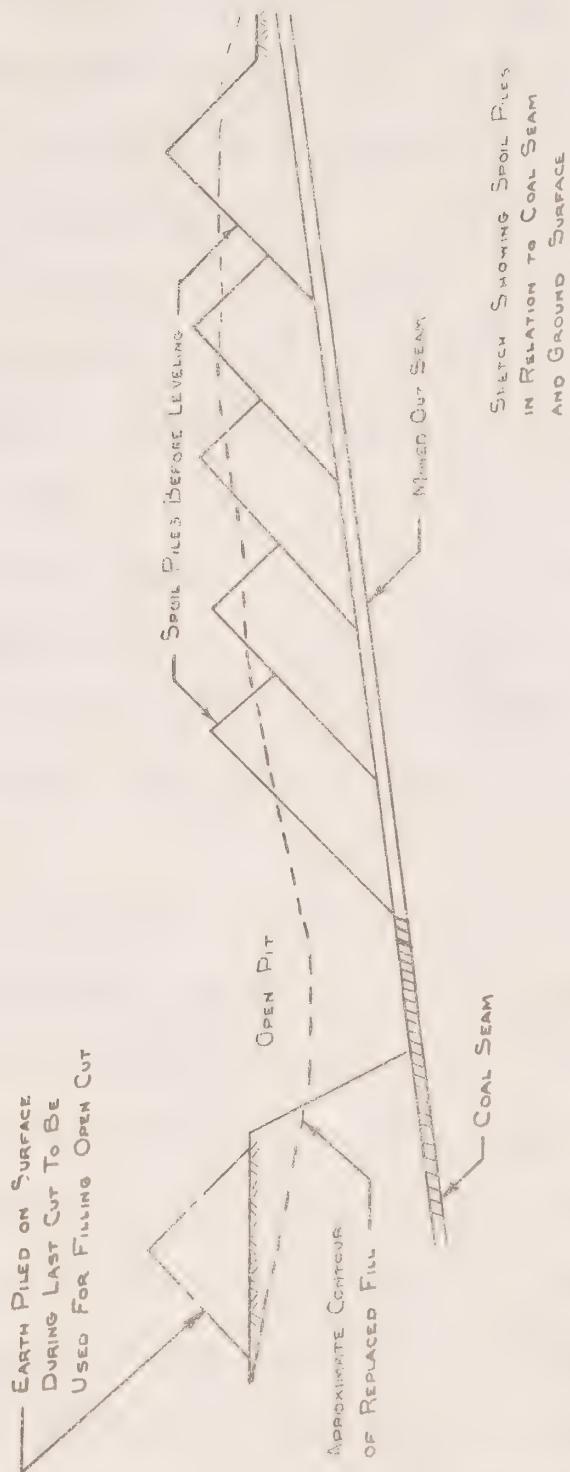


GEOLOGICAL CROSS-SECTIONS





Diagram II



PROPOSED COAL STRIPPING OPERATION







1 MR. GUNN:

2 Mr. Commissioner, at this moment in order  
3 to keep the matter in chronological order, I would  
4 like your permission to call Mr. Stephen Dolhanty as  
5 a result of something which arose from this particular  
6 brief which is Exhibit 18. He would like to make  
7 a statement and also as president of the U.M.W., to  
8 carry on with presentations of his brief.

9 MR. DOLHANTY: I might say at the start,  
10 Mr. Commissioner ---

11 THE CHAIRMAN: Who do you represent?

12 MR. DOLHANTY: I represent the United  
13 Mine Workers of American as a vice-president of  
14 District 26 which takes in New Brunswick, and Nova  
15 Scotia.

16 It comes as a surprise that this brief  
17 has come before the Commission. I question --  
18 although I do not want to suggest or to cut out the  
19 exact work of the Commission, but I question the place  
20 it would play in your investigation down here, because  
21 I doubt -- it is a personal opinion -- whether our  
22 Honourable Prime Minister Mr. Diefenbaker would have  
23 appointed a Commission to come into the coal fields  
24 in this area if it was just a pure question of  
25 economics, and there were no main disturbances or  
26 chaos.

27 It is quite clear from the start in respect  
28 to the presentations and the facts and statistics in  
29 the Minto fields, that strip mining is not conducive  
30 to the employment of labour. It really falls on





1 high capitalization, which is grudged going outside  
2 of our area.

3 THE CHAIRMAN: There is no doubt about  
4 that.

5 MR. DOLHANTY: There is no doubt about  
6 that, and I also was a little surprised it would appear  
7 here and not in the Province of Nova Scotia. The  
8 question of efficiency and the question of coal  
9 mining generally has been questioned and described in  
10 my opinion very poorly.

11 THE CHAIRMAN: You need not concern yourself  
12 about that. I fancy that it was put in here because  
13 of the advanced date of this investigation, so it  
14 does not make any difference what place it is put in.

15 MR. DOLHANTY: That is possible. I am  
16 leading up to say that on page 1 of their brief it  
17 reads, "The only prior knowledge which we had" -- that  
18 is Mr. Wasson and his company speaking -- "of the  
19 coal resources in Nova Scotia suitable for mining  
20 by shipping methods, was given to us by Mr. Stephen  
21 Dolhanty District Vice-President of the United Mine  
22 Workers of America early in the summer of 1959".

23 It appears to me that if that is their very  
24 first knowledge of the coal resources in Nova Scotia  
25 and the peculiarities which differ greatly than those  
26 of Minto, if that is their first information of it,  
27 early in 1959, they must have assimilated a lot of  
28 information in that short time.

29 It is true, Mr. Commissioner, that always and  
30 everywhere, I and all the district officials of the







1 United Mine Workers of America, and it is part of the  
2 reason why we are as large as we are, that the United  
3 Mine Workers of America officials have consistently  
4 spoken of the importance of coal as a natural resource  
5 and the importance of employment and what have you to  
6 the Province of Nova Scotia and New Brunswick. Any  
7 construction that Mr. Wasson or his company might  
8 put on any conversation we had with respect to coal  
9 in the Nova Scotia area, may I take the opportunity  
10 of telling the Commission and Mr. Wasson that in no  
11 way could our conversation be construed that we  
12 were inviting strip mining into Nova Scotia, basically  
13 for this fact, that our type of mining is not  
14 susceptible to strip mining.

15 In Saskatchewan and in New Brunswick they  
16 have a broad seam, whereas it has been described that  
17 all our seams are submarine going well into the Atlantic  
18 Ocean. It is quite true, that as you said, what  
19 strip mining does in the east would be to skim the  
20 cream off the crop of our coal.

21 Another thing was, if you can strip in Nova  
22 Scotia, to my knowledge, and the Commission can find  
23 this information out in Nova Scotia, would they not  
24 be interfering with a seam with its potential, both  
25 in quantity and quality. It is true that in the  
26 area they are talking about as Mr. Wasson said, that  
27 the area had been worked out, but let me tell the  
28 Commissioner this, to give you an indication of the  
29 percentage of coal that they can take out of the seams  
30 of Nova Scotia, it may be well to go to the application





1 that was made before the Nova Scotia Government by  
2 Mr. Wasson where he indicated he was asking for permission  
3 to commence the strip operation on the Collins seam.  
4 You can find information -- and this can be verified  
5 by the newspapers and in the Department of Mines of  
6 the Province of Nova Scotia -- that in May of 1957 this  
7 area where he has made a specific request to strip,  
8 the Bras d'Or Coal Company Limited made application  
9 to open a mine which they called the Atlantic Mine.  
10 They had previously been working the Franklin Mine  
11 down the road about a mile with the intention of taking  
12 their crews with them. They made application to  
13 open this area in which they said themselves there  
14 was a potential of 250 to 300,000 tons of good quality  
15 mineable coal. The Provincial Government in  
16 Nova Scotia assisted them by direct financial means.  
17 They gave to this company \$50,000 at that time, to be  
18 paid back on the royalty on this mine. They only  
19 worked 11 months, extracted I would imagine about 8  
20 to 10,000 tons of coal. You can check the application  
21 in the Mines Department. It is proposed that  
22 approximately 50,000 tons would be taken out of that  
23 area, which it suggests that they would take out less  
24 than one-third of the potential coal that was described  
25 by this very same company to sub-lease this area to  
26 Mr. Wasson and his company. That, in itself, will  
27 give you an indication of that area not being susceptible  
28 to strip mining.

29 Even further back than 1946 in the Royal  
30 Commission, the Duncan Commission, it was suggested that







1 in the seams in question, those areas were of such a  
2 nature and the quality of coal was of such a nature  
3 that it was not profitable to mine. That might  
4 have been a prudent policy back in those years, but  
5 with the modern method of cleaning and preparation,  
6 it is no longer applicable to those seams. Every  
7 seam in that area has a potential of many millions  
8 of tons of coal that will be mined some day.

9 We suggest, and we argue against strip mining  
10 not only because of the confusion that it will cause  
11 in this already confused coal industry in regard  
12 to the obtaining of markets, not only that, but we  
13 suggest it will destroy forever the material and  
14 economical approach to that seam of coal.

15 May I tell the Commissioner this, that he  
16 will find that on the number seven seam in the Little  
17 Pond Area, Dosco entered into a contract with D.W.R.  
18 Mills of Minto to strip that mine. He operated  
19 it for them and they went in and agreed to settle  
20 it one way or another. In the process of this  
21 strip mining, they stripped across the face about a  
22 mile away from the seashore. They stripped across  
23 the face of a beautiful seam of coal there. After  
24 he pulled out, Steve Collette attempted to go underground  
25 to start an underground mine. They worked that  
26 for about a year and they found out one morning they  
27 had no mine. At certain times in the season they  
28 could not operate it because of excessive weather.  
29 Another mine in the McCurdy area is operated just  
30 below that in another seam of coal, the Indian Coal







1 Company which is the upper seam of Jubilee, that  
2 operator has said that because of the terrain and  
3 the nature of the terrain, that if he stripped across  
4 that ridge, that within two months he would have to  
5 close his operations. They have in the vicinity  
6 of 1100 to 1400 employed in that area digging coal.

7 Our attempts to go underground after the  
8 strip is completed is clearly not feasible. The  
9 attempts of old Steven Coleridge who had all the latest  
10 techniques to attempt to do that job went to no  
11 avail. So there was nothing personal in this  
12 question. It is just a question of the seam of  
13 coal not being susceptible to strip, and the only  
14 possible thing that can be done is the destruction  
15 of our coal seams, which you said yourself, Mr.  
16 Commissioner, a little while ago, it is an important  
17 resource and we should conserve at least as much as  
18 possible for prosperity. It is not ours to destroy.  
19 That is why the U.M.W. oppose it, because it is a  
20 destruction of an important resource.

21 It seems to me it would only afford an  
22 operation of not more than 10 years, and it would  
23 be in that ten years a larger operator than the  
24 Dominion Coal Company Limited. Another operator in  
25 Minto has been interested in another area there, and  
26 it looks like if this man comes in to that area, we  
27 will have three strip operations and further chaos  
28 in the matter of social upheaval. Those are the  
29 reasons U.M.W. oppose this strip mining operation,  
30 sir.





1 MR. WASSON: One thing Mr. Dolhanty  
2 brought up disturbed me. He said the Bras d'Or Coal  
3 Company received \$50,000 revenue from the Provincial  
4 Government or from some Government to open up this  
5 mine. And he said he only ran it eleven months  
6 and had to close down. That only backs up my  
7 statement.

8 THE CHAIRMAN: We have allowed this  
9 to go crazy.

10 MR. DOLHANTY: I think greed came in the  
11 picture there, sir.

12 THE CHAIRMAN: It is a matter for the  
13 Nova Scotia Government, and I would not presume to  
14 advise them one way or another about the approval  
15 of a lease. That is beyond any scope of this  
16 Commission.

17 MR. WASSON: May I suggest the Provincial  
18 Government suggested this would be brought up before  
19 the Rand Commission. This is something which should  
20 be given consideration.

21 THE CHAIRMAN: It may be indirectly, but  
22 certainly not directly. I will not attempt to  
23 tell the Nova Scotia Government what it ought to do.  
24 Once we know what the conditions are, I think we have  
25 to leave Governments alone.

26 MR. DOLHANTY: I think the Minister of  
27 the Provincial Mines Department of Nova Scotia will  
28 clearly state as far as the mining methods to be used,  
29 the whole Act would have to be changed by recommendations  
30 of this Commission in order to conform, and I don't







1 think the Commission would go that far.

2 MR. WASSON: I do not think there was any  
3 legislation changed when they were carried out before.

4 MR. DOLHANTY: It was brought into that  
5 area over the heads of the workers and over the heads  
6 of a lot of people, and it got into development  
7 because the coal industry was disturbed as they are  
8 now. It was a shame and a crime because they  
9 destroyed millions of tons of coal in that particular  
10 seam, which can only be obtained by going back maybe  
11 half a mile or a mile and going into a rock tunnel  
12 below the sea in order to obtain that seam. That is  
13 not a normal way of approaching a seam.

14 THE CHAIRMAN: We have ventilated this  
15 pretty well. Mr. Wasson is very persuasive, and  
16 I suggest a trip to Halifax will probably be most  
17 effective.

18 MR. WASSON: I make quite a few trips to  
19 Halifax and I think it is a personal matter. I think  
20 the U.M.W. are hollering their heads off down there  
21 and the Government is scared.

22 MR. DOLHANTY: The protection of the  
23 New Brunswick operators is at stake here. We do  
24 not want to separate our interests from Nova Scotia  
25 or New Brunswick or vice versa. We know that area.  
26 They have a market for this coal, and we also know  
27 if this coal is mined, if you are going to look at the  
28 marketability of this coal, it will be marketed in  
29 the local regions, and it will be marketed to the  
30 disadvantage of the men who are already in this area





1 and there will be confusion in this area, even more  
2 than in Nova Scotia.

3 THE CHAIRMAN: We now know what the situation  
4 is, and it isn't one to be entered into without getting  
5 facts. That is the first thing that we are dealing  
6 with here.

7 With Mr. Wasson's energy and resourcefulness  
8 and ideas, I have no doubt that he will achieve  
9 whatever may be possible.

10 MR. ELLIS: The next brief will be  
11 presented by Mr. J. Streeter on behalf of the Avon  
12 Coal Company which will be Exhibit 19.

13  
14 ---EXHIBIT NO. 19: Submission of the Avon Coal  
Company.

15  
16 SUBMISSION OF  
17 THE AVON COAL COMPANY

18 APPEARANCE:

19 Mr. J. Streeter

20 MR. J. STREETER: Gentlemen, we very much  
21 appreciate the opportunity to make a submission to the  
22 Royal Commission on Coal and to outline some of our  
23 present problems and some of the difficulties we  
24 expect to encounter in the near future. I think  
25 you have met Mr. James Streeter, my brother, and  
26 Mr. Jackson who are here with me.

27 It is believed that the New Brunswick Royal  
28 Commission on Coal will make its findings available  
29 to the Commission. A broad picture of the industry  
30 as a whole will be given, together with pertinent facts





1 such as the number of men employed, amount of wages  
2 and salaries, capital invested, etc. The Royal  
3 Commission's findings will no doubt bring out the ways  
4 in which the Provincial Governments in the last ten  
5 years have increased coal operating costs generally,  
6 first by increasing in 1950 the cost of power by 25  
7 per cent purchased from the New Brunswick Electric Power  
8 Commission, second in 1951 by increasing the royalty  
9 paid by 50 per cent from 9 cents to 14 cents per ton,  
10 and lately by the imposition of a sales tax of 3 per  
11 cent on the purchase of explosives and wire rope.

12 It is to be hoped that there will be a recommendation  
13 for the elimination of these increases to enable the  
14 industry to exist under market conditions which, in  
15 the future, will be extremely competitive.

16 In the near future additional sources of  
17 Bunker "C" oil will be opened up, with the necessity  
18 that this be marketed. If the Minto coal industry  
19 is to be spared the impact of this competitive fuel,  
20 a market for the oil must be found and the logical  
21 market would seem to be that which now is being served  
22 by the import of residual oil. It is felt that  
23 higher rates of duty on such oil might bring about  
24 this desirable situation.

25 Markets exist within the Province, chiefly  
26 in the pulp and paper field, for a large tonnage of  
27 New Brunswick coal. These outlets have been  
28 retained largely through a programme of coal benefic-  
29 iation -- washing and drying -- and also with the help  
30 of the Provincial Government. It is hoped that the







1 paper industry will continue to patronize our industry,  
2 but we are afraid that competition from residual oil  
3 will become more severe.

4 THE CHAIRMAN: In what way did the Provincial  
5 Government help? You say it helped the industry.

6 MR. STREETER: Mr. Commissioner, it has  
7 been our understanding that officials of the Government  
8 have been instrumental in talking to the companies  
9 and persuading them to remain with coal for the  
10 time being.

11 While the Province exports a relatively small  
12 percentage of its total production into the  
13 Provinces of Quebec and Ontario, the tonnage is of  
14 tremendous importance to those operators who enjoy  
15 these sales. They are made possible only by  
16 subventions and, with the increasing competition from  
17 oil and natural gas, it is doubtful if even the  
18 present subventions may be adequate to maintain these  
19 markets. Much has been said in comparison of the  
20 economic situation of the East with that of Canada as  
21 a whole, and many suggestions have been made to improve  
22 the Eastern Canadian situation. It would, therefore,  
23 seem to be a great mistake for subventions to be  
24 placed on an inadequate basis which would have the  
25 effect of hurting rather than helping one of the main  
26 industries in the East -- the coal mining industry.

27 In the New Brunswick industry the mining  
28 of coal by the stripping method has assumed very large  
29 importance, with 80 per cent of the coal produced  
30 being done by stripping. This type of operation





1 requires a continuing investment of large amounts of  
2 capital in plant and equipment, and several millions  
3 of dollars are now so invested. To secure complete  
4 mechanization these large expenditures for heavy  
5 machines are necessary, and it is only by complete  
6 mechanization that costs can be maintained at a level  
7 low enough so that prices may be competitive.  
8 Necessary funds could not have been secured in many  
9 cases if it had not been for loans made available  
10 by the Dominion Coal Board through the operation of the  
11 Coal Production Assistance Act. It is hoped that  
12 more Government assistance of one kind or another may  
13 be procured. Submitted by Avon Coal Company Limited.

14 THE CHAIRMAN: Do you think really that  
15 the coal industry ought to be maintained at no cost  
16 at all? You see, in other countries they are  
17 meeting this in several ways. In one statement  
18 I read about a particular country they were not  
19 capable of meeting a dying industry. The coal  
20 itself does not die. Its life may be postponed  
21 for some time, but what is the limit of the amount  
22 that you think should be given to maintain a certain  
23 level of production? Suppose you said, and we  
24 will confine ourselves to New Brunswick and I am just  
25 making this suggestion by way of supposition --  
26 supposing you said that you are placed in a position  
27 of jeopardy in the New Brunswick market.

28 MR. STREETER: Our own company?

29 THE CHAIRMAN: The Minto area as a whole.  
30 I would say if you have a natural market, it is the







1 Province of New Brunswick. Supposing you set out  
2 to retain that in the face of all sorts of competition,  
3 what would that amount to, in the reduction of your  
4 annual output?

5 MR. STREETER: About slightly over 50  
6 per cent, between 50 and 60 per cent of our total  
7 production is consumed within the province.

8 THE CHAIRMAN: Where is the balance of  
9 50 per cent consumed?

10 MR. STREETER: We ship to the State of  
11 Maine.

12 THE CHAIRMAN: What percentage do you ship  
13 to Maine?

14 MR. STREETER: To the State of Maine we  
15 would ship about 35 per cent.

16 THE CHAIRMAN: That leaves about 15 per  
17 cent. That goes into Quebec, does it?

18 MR. STREETER: No, it would be 20 per cent,  
19 anyway.

20 THE CHAIRMAN: How far west does that go?

21 MR. STREETER: We ship almost as far as  
22 to the Ottawa district.

23 THE CHAIRMAN: What is the subvention per  
24 ton to Ottawa?

25 MR. STREETER: It is the same as Nova Scotia,  
26 70 per cent.

27 THE CHAIRMAN: 70 per cent?

28 MR. STREETER: Yes.

29 THE CHAIRMAN: The average of your production  
30 here shows, the average for the field shows that you come





1 out with a fairly substantial profit on each ton of  
2 coal, \$4.47 in 1958. The average value was \$8.37  
3 and the average labour cost was \$3.11, with electricity  
4 and fuel at .79 cents, leaving the net return at say  
5 \$4.47 cents a ton. There would be, I suppose,  
6 income tax.

7 MR. STREETER: I am not familiar with  
8 those particular figures, but I have the figures of  
9 the Dominion Coal Board showing that the area in 1958  
10 made a profit of 20 cents a ton.

11 THE CHAIRMAN: That was only for the  
12 purpose of the subvention, wasn't it? Was that  
13 the actual cost?

14 MR. STREETER: No sir.

15 THE CHAIRMAN: We will check that up.  
16 What did you say was your profit?

17 MR. STREETER: Our profit has been less  
18 than 3 per cent of our capital investment for the  
19 last three or four years.

20 THE CHAIRMAN: Would you give me a  
21 statement of your last three years, the actual returns?

22 MR. STREETER: I can file it with you, yes.

23 THE CHAIRMAN: Because your whole operation  
24 has been strip mining.

25 MR. STREETER: They have, yes sir.

26 THE CHAIRMAN: To what depth?

27 MR. STREETER: To a depth of up to 70  
28 feet, 75 feet, with an average of about 40 feet.

29 THE CHAIRMAN: What is the nature of the  
30 material that you have to remove?





1 MR. STREETER: It is sandstone, shale.

2 THE CHAIRMAN: Are you familiar with the  
3 Saskatchewan operation?

4 MR. STREETER: I am not myself, sir.  
5 We have to blast everything and our costs are higher.

6 THE CHAIRMAN: In 1958-59 according to  
7 the latest return of the Coal Board, you had a profit  
8 before income tax of 70 cents a ton, that is the  
9 average for New Brunswick, not your own company.  
10 That is the average New Brunswick produced.

11 MR. STREETER: The figure I have for  
12 the Dominion Coal Board is 20 cents a ton.

13 THE CHAIRMAN: This is for 1958-59, the  
14 end of March 1959. It is the latest report of the  
15 Board. It shows the average for New Brunswick  
16 \$8.20. No, the total income was \$8.70 and the  
17 cost was \$8., leaving a net return before income tax  
18 of 70 cents a ton. That is the average for the  
19 whole field. You have not seen this report?

20 MR. STREETER: No, but I think that is  
21 not the figure for 1958-59. Are you sure it is  
22 not 1956 or 1957?

23 THE CHAIRMAN: 1957, yes. This is  
24 the report for 1958-59, but 1958 is reduced.

25 MR. STREETER: It is reduced to 20 cents?

26 THE CHAIRMAN: From 70 cents.

27 MR. STREETER: Yes.

28 THE CHAIRMAN: Due to loss of your markets,  
29 or what?

30 MR. STREETER: No, I do not think so.







1 The labour cost is a factor to some extent, the cost  
2 of supplies has gone up terrifically.

3 THE CHAIRMAN: Do you mean to say that has  
4 come down 50 cents from your net revenue or your  
5 revenue before tax deductions.

6 MR. STREETER: Before income tax.

7 THE CHAIRMAN: And from that 20 cents  
8 you deduct income tax?

9 MR. STREETER: Yes.

10 THE CHAIRMAN: Is that shown on your own  
11 statement?

12 MR. STREETER: Yes.

13 THE CHAIRMAN: And you will let me have  
14 that?

15 MR. STREETER: Yes.

16 THE CHAIRMAN: I cannot imagine anything  
17 more difficult. What limit are you going to  
18 place on the amount of subsidy by which you support  
19 an industry that in an economic sense is incapable  
20 of looking after itself?

21 MR. STREETER: We think the present subsidies  
22 are sufficient.

23 THE CHAIRMAN: Yes, they thought that was  
24 so a few years ago, but conditions changed and next  
25 year you may find it is not sufficient. Then what?

26 MR. STREETER: The refinery will make  
27 quite a difference.

28 THE CHAIRMAN: Yes, and if you are in  
29 business you have to employ some degree of economics?

30 MR. STREETER: We are trying all the time





1 to do that, sir. Of course one of our greatest  
2 problems has been the loss through washing and drying  
3 our coal. We have had to do this to maintain  
4 the markets, and that has been a terrific cost.

5 THE CHAIRMAN: What market? What did  
6 you say?

7 MR. STREETER: To maintain our present  
8 markets. We hope some saving will come through  
9 the further process we are about to start very shortly.  
10 Our losses have been 28 to 30 per cent of our raw  
11 product through washing and drying the coal, which is  
12 very high. We hope, by further refinements  
13 which we are trying to develop, that we can reduce  
14 those losses.

15 THE CHAIRMAN: I have no doubt that you are  
16 hoping for that. The large difficulty is to get  
17 some idea of the principle of what is called, and is  
18 in effect, an artificial support, whether it can be  
19 justified?

20 MR. STREETER: I think you and Professor  
21 Smith discussed that, and the justification that he  
22 gave is probably the best one. It is the only one,  
23 really.

24 This is a national economy, and if you are  
25 going to try to bring about the advancement of the  
26 nation as a whole, and if Central Canada can justify  
27 their tariff of a very similar nature, there is no  
28 difference between a tariff and a subsidy, so far  
29 as I can see. If the rest of Canada is to have  
30 their tariffs, we can justify our subsidies.







1 THE CHAIRMAN: Except this, these last  
2 few increases have not resulted in corresponding  
3 increases in tariff, corresponding to the increases  
4 in subsidies. You have a more specific situation.

5 MR. STREETER: I certainly agree. You  
6 are looking for the limit?

7 THE CHAIRMAN: Yes, some rational  
8 conception of what can be the basis of what can be  
9 applied. We can go ahead meeting this situation,  
10 but if you are increasing the subsidy, you will reach  
11 a point where you can put that money to better  
12 advantage somewhere else. I suppose you are interested  
13 in promoting other industrial activity in the Province,  
14 and it is very difficult to bring that about.

15 MR. STREETER: We are not trying to rely  
16 completely on subventions. We are trying to do our  
17 best in our own company.

18 THE CHAIRMAN: I think you are. The  
19 difficulty lies in the nature of the situation.

20 MR. GUNN: I have one question. Do  
21 you get any assistance at all from the Provincial  
22 Government?

23 MR. STREETER: No we don't, sir.

24 MR. GUNN: The subvention is the only  
25 assistance you get from the Federal Government?

26 MR. STREETER: Correct.

27 MR. GUNN: That is all.

28  
29 ---Luncheon adjournment.  
30





1 ---Upon resuming at 2.30 p.m.

2  
3 MR. ELLIS: Mr. Commissioner, I would like  
4 to present William H. Marsh who will present the brief  
5 on behalf of District 26, United Mine Workers of  
6 America. This brief becomes Exhibit number 20.

7  
8 ---EXHIBIT NO. 20: Submission of District 26,  
9 United Mine Workers of America.

10 SUBMISSION OF

11 DISTRICT 26, UNITED MINE WORKERS OF AMERICA

12 APPEARANCE:

13 Mr. William H. Marsh  
14 President, District 26, United Mine Workers of  
America.

15 MR. WILLIAM H. MARSH: Mr. Commissioner,  
16 gentlemen, District 26, United Mine Workers of  
17 America, are most gratified for this opportunity of  
18 presenting our views on the New Brunswick coal industry.  
19 We are pleased that the Federal Government has deemed  
20 the coal industry sufficiently important to appoint a  
21 Royal Commission to investigate the problems that are  
22 besetting the industry in both Eastern and Western  
23 Canada. We are particularly pleased with your  
24 appointment to this important task and we feel certain  
25 that some solution to the long range Canadian coal  
26 production and marketing problems will emanate from  
27 your investigation.

28 We wish to indicate to you that this submission  
29 to the Royal Commission will be rather abbreviated  
30 because at the time of the writing of this report the





1 the findings of the Royal Commission on the New  
2 Brunswick Coal Mining Industry were not available to  
3 the United Mine Workers of America. We do, however,  
4 wish to emphasize that when the recommendations of this  
5 Commission become public that we may supplement this  
6 brief by either a written or oral submission at a  
7 later date.

8 Coal production in this Province was 993,821  
9 tons in 1959. The New Brunswick Power Commission  
10 consumer 161,416 tons of this production in 1959.  
11 This is a large scale single market which the New  
12 Brunswick coal industry could ill afford to lose.  
13 It has been indicated that the future generation of  
14 electricity would consume huge amounts of foreign  
15 oil instead of natively produced coal which is returning  
16 a substantial income to a large and important  
17 segment of the population of New Brunswick.

18 The coal mining industry in this Province is  
19 now providing an income of approximately ten million  
20 dollars a year to the people of New Brunswick. We  
21 firmly believe that an industry of this size should not  
22 be allowed to deteriorate to any extent, but should be  
23 given every advantage possible to enhance the prosperity  
24 of the people of the Maritime Provinces in general,  
25 and the Province of New Brunswick in particular.

26 During the last ten years, coal production  
27 has almost doubled in this Province -- for instance,  
28 the total production in 1948 was 519,599 tons, and in  
29 1959 the production reached a total of 993,821 tons.  
30 This has been the most significant percentage-wise







1 increase in any coal producing province in Canada,  
2 and furthermore the profits derived from this production  
3 are most lucrative.

4 The coal mining industry in this Province is  
5 plagued by a relatively low wage rate and by that we mean  
6 low in relation to the wages paid in other coal mining  
7 provinces in the Dominion of Canada. Productivity  
8 is fair in the shaft mines and good in the strip mining  
9 operations, but wages paid to the employees continue  
10 to be on a sub-standard level.

11 Another disturbing factor that affects all  
12 the citizens of the Province is the shameful condition  
13 in which the worked-out areas are left by the dragline  
14 operators. Hundreds of acres are pockmarked with deep  
15 craters and mountains of rock and shale. These  
16 pits gradually became filled with stagnant water  
17 which have claimed the lives of at least three children  
18 in the last couple of years. We have information  
19 that the strip mining operators in the United States  
20 pay approximately ten cents (10¢) per ton to rehabilitate  
21 the land. District 26, United Mine Workers of  
22 America, have pleaded with the present Government and  
23 the previous government to enact legislation to compel  
24 dragline operators to undertake a programme of reconvers-  
25 ion of the land that has been left ruined, and we fully  
26 expect that this will be one of the pertinent points  
27 recommended by this Commission.

28 Another matter which is causing considerable  
29 concern to the United Mine Workers of America is the  
30 amount of unemployment that exists during the warmer





1 months of the year in the mining area of Minto, New  
2 Brunswick. Many mine workers are only working three  
3 or four days per week, while some operators are compelling  
4 their men to work seven days per week. This  
5 practice of forcing men to work on the Sabbath must be  
6 ended by Government action and we fully trust that  
7 this will be one of the recommendations of this Commis-  
8 sion. This would serve the two-fold purpose of  
9 providing more employment for every mineworker in  
10 the Province, as well as giving each worker the God-  
11 given right that he will enjoy at least one day a week  
12 away from his labour.

13 Methods of Mining: Coal mining

14 operations in this Province are carried on by both shaft  
15 and stripping methods. Approximately 81 per cent of  
16 the coal is extracted by the open pit operations,  
17 while the remainder of the production is mined by the  
18 shaft or slope method. At the present time, there  
19 are nine stripping operations and five shaft mines in  
20 the Minto district. During the past decade,  
21 coal production in New Brunswick has increased tremend-  
22 ously with a resulting benefit to the people of the  
23 Province. This increase has been due to a large  
24 degree by increased activity in the strip mines, but  
25 this Union is firm in its belief that future  
26 coal operations in New Brunswick depend on increased  
27 production from the shaft or slope collieries. Strip  
28 coal mining can only be continued until the over-  
29 burden becomes so heavy that it becomes uneconomical  
30 to mine the coal by this method. It then becomes







1 necessary to conduct underground operations to extract  
2 the available coal. We, therefore, strongly recommend  
3 to this Commission that special emphasis be placed on  
4 the most advantageous mining methods and the proper  
5 preparation of the coal extracted.

6 It is the opinion of the United Mine Workers of  
7 America that an extensive programme of mechanization is  
8 necessary to adequately increase the productivity  
9 in the New Brunswick shaft mines. While some research  
10 has already been undertaken in this direction, suitable  
11 machinery has not yet been installed to increase the  
12 low per-man-day output that now prevails in the under-  
13 ground seams of the Minto coal field.

14 The present method of shaft mining in New  
15 Brunswick consists of shooting the coal out of the  
16 solid coal face. This procedure, while not only  
17 being expensive and relatively non-productive, is a  
18 menace to the health of the mine workers involved  
19 in the operation. We, therefore, suggest that one  
20 of the prime recommendations of this Commission would  
21 be a further investigation to locate suitable mechanized  
22 equipment which would increase productivity in the shaft  
23 operations of New Brunswick.

24 While increased productivity in shaft mining  
25 is of vital importance to the future of the coal  
26 industry in New Brunswick, there still remains the  
27 problem of disposing of the tonnage produced. Domestic  
28 and industrial consumers of coal are becoming ever  
29 more quality-conscious of the fuel they buy. We,  
30 therefore, deem it imperative that a proper coal





1 washing plant be located in the Minto area to assure  
2 that the coal will be of a quality to satisfy those who  
3 use it. We realize that our suggestions involve  
4 an expenditure of considerable sums of money, but it  
5 is only in this manner that productivity can be increas-  
6 ed and a suitable product put on the market. The  
7 Maritime Coal Assistance Act is designed to aid  
8 coal producers who desire to mechanize and modernize  
9 their operations and we feel that a coal washery could  
10 be erected in a central location by co-operation among  
11 the various operators and yet not destroy competition  
12 within the industry.

13 Markets for New Brunswick Coal: The

14 New Brunswick Electric Power Commission is one of the  
15 chief outlets for Minto coal. For instance,  
16 consumption of coal by the Power Commission has  
17 increased from 103,773 tons in 1947 to 161,416 tons in  
18 1959, and the estimated demand by the Power Commission  
19 projected into 1964 is 357,500 tons providing that  
20 oil does not make inroads into this market for coal  
21 by that time.

22 Although this is a steady market and very  
23 vital to the coal industry in this Province, it is  
24 complicated by a system of penalty clauses depending on  
25 the quality of the coal. Earlier in this submission  
26 we have suggested that the coal operators must face  
27 the fact that an extensive mechanization programme  
28 should be undertaken in the near future and that Minto  
29 coal be washed and otherwise properly prepared. We  
30 are sincere in our belief that a programme of this kind







1 must now be quite apparent to the coal operators in  
2 this Province if the industry is going to be competitive  
3 with other fuels. With this thought in mind, we  
4 are of the opinion that this Commission should recommend  
5 that penalty clauses should be deleted from the purchasing  
6 policy of the N.B.E.P.C. until the operators begin a  
7 programme of mechanization and modernization. After  
8 that they will be unnecessary anyway.

9 In past years, most of the coal produced  
10 in New Brunswick was consumed within the Province, but  
11 gradually a market has been developed in the Province  
12 of Quebec. The whole eastern coal industry --  
13 not only here, but in Nova Scotia -- must make every  
14 effort to put a very well prepared product into this  
15 market. This becomes increasingly important as  
16 the St. Lawrence Seaway and the Trans Canada Natural  
17 Gas Pipeline progress toward completion. Energy  
18 consumers in Quebec and elsewhere are going to demand  
19 a clean and economic commodity to produce their power  
20 requirements. In a short period of time they  
21 will have a choice of natural gas, hydro electric  
22 power, imported oil, or imported or native coals.  
23 It may seem that this brief is over-emphasizing the  
24 importance of a high quality coal for the Maritime  
25 Provinces, but trends indicate that unless our coal is  
26 made available to these Quebec consumers, at a  
27 competitive price and quality, that we may possibly  
28 lose a golden opportunity to further develop this  
29 important market. That is why we stress that an  
30 immediate investment of substantial amounts of money







1 to mechanize and modernize the New Brunswick coal industry  
2 is imperative to at least maintain, and possibly  
3 expand, this basic natural resource, and we trust that  
4 this will be the most important recommendation of this  
5 Commission.

6 While the markets for New Brunswick coal are  
7 limited, to a certain extent, to the Province of  
8 New Brunswick, Quebec, and the New England States of the  
9 United States of America, we are of the opinion that  
10 market requirements could be increased in the State  
11 of Maine, U.S.A. The pulp and paper industry along  
12 the Eastern Seaboard is sufficiently large to absorb  
13 additional tonnages of New Brunswick coal. We  
14 admit that the Federal Government is reluctant to  
15 subsidize any native product for export, but we are  
16 of the opinion that this Commission should closely  
17 study the possibility of enlarging the market for New  
18 Brunswick coal in the New England States and recommend  
19 to the Federal Government through the Dominion Coal  
20 Board that every assistance be given to market  
21 New Brunswick coal in the New England States of the  
22 United States of America.

23 While on the subject of markets for New  
24 Brunswick coal, we feel we should make reference to  
25 the substantial amounts of oil used in Government build-  
26 ings in this Province. It must be kept in mind  
27 that all of the oil consumed here is an imported  
28 product used in direct competition to New Brunswick  
29 coal. It is our opinion that preferential treatment  
30 should be directed toward the coal industry to supply





1 the requirements of Government purchases of fuel  
2 used in Government buildings and installations. A  
3 policy of this nature would set an example for other  
4 fuel consumers in the province and possibly induce  
5 them to favour the use of New Brunswick mined coal  
6 rather than foreign oil, and we feel that this should  
7 be another recommendation of this Commission.

8         The preliminary estimates of coal reserves,  
9 as provided to the Union by the New Brunswick  
10 Royal Commission on Coal are greatly appreciated and  
11 while the information supplied is accurate to some extent  
12 -- much of it is based on assumption.         The terms  
13 of reference of this Commission (Royal Commission on  
14 New Brunswick Coal Industry) are inter-related in that  
15 any interested groups are invited to submit proposals  
16 as to the desirable level of annual output for the  
17 coal industry of New Brunswick, and the probable  
18 trends in the total cost per ton that may be experienced  
19 in the years to come.         The desirable output would be  
20 one that would dispose of as much coal as possible  
21 in any year -- providing that the workers, the  
22 employers, and the consumers all received a just share  
23 of any profits that may be forthcoming.         This, of  
24 course, depends on what the attitude of the coal  
25 operators would be in relation to a rapid and advanced  
26 programme of mechanization and modernization.

27         There are approximately 6,000 people in the  
28 Minto area, and their sole means of support depends  
29 on continued coal operations.         It has been estimated  
30 (Dominion Bureau Statistics) that there are 4.7 members







1 per family in this Province which places the direct  
2 source of livelihood of about 10,000 people on the New  
3 Brunswick coal industry. An industry of this size  
4 is very important to the Provincial economy and with  
5 proper direction we feel it could make a substantial  
6 contribution to the future economic life of this  
7 Province.

8 It has been stated earlier in this brief that  
9 wage rates are relatively low in New Brunswick despite  
10 the fact that the profit per ton of coal mined is  
11 relatively high. A satisfied and stabilized working  
12 force can only be attained in an industry where wages  
13 are good and working conditions are favourable.  
14 This situation does not obtain in most of the coal  
15 operations of New Brunswick. The cost of living  
16 and the standard of living are similar in Nova Scotia  
17 and New Brunswick, but a coal miner in this Province  
18 works for considerably less money than his counterpart  
19 receives in Nova Scotia. It seems reasonable to  
20 expect that many mine workers will gravitate to other  
21 industries when the opportunity arises to improve  
22 their standard of living. The coal operators must  
23 pay sufficient wages to maintain an efficient labour  
24 force, or be confronted with a high percentage of  
25 labour turn-over which is both costly to the operation  
26 and does not tend to keep experienced men in the coal  
27 industry.

28 Working conditions in the coal industry are  
29 not satisfactory in this Province. The inferred coal  
30 reserves are most self-explanatory because of the





1 destitute condition in which strip operators leave  
2 their workings and move to more lucrative areas.  
3 Their coal cuts are allowed to fill with water and  
4 forever prevent the recovery of coal that might have  
5 been gained by shaft or slope mining. The present  
6 method of shaft mining that now prevails in this Province  
7 has been referred to earlier, but we must reiterate  
8 that some adequate method of proper ventilation must  
9 be recommended by this Commission. The high percent-  
10 age of explosive powder used to blow the coal out of the  
11 solid face, combined with poor ventilation, certainly  
12 is detrimental to the health of every underground worker  
13 in this Province.

14 I might mention in passing, Mr. Commissioner,  
15 that this evidently has been taken care of in the  
16 plant mechanization procedure which the operators  
17 plan to go ahead with in the future. One, of  
18 necessity, will take care of the other.

19 We trust that this Commission will recommend  
20 that the coal operators be compelled to provide adequate  
21 wash house facilities for the coal mine workers of  
22 New Brunswick. In at least one instance, the working  
23 force was charged a fee for the use of a wash house,  
24 which is a practice that is entirely foreign to the coal  
25 industry of Eastern Canada. Other wash houses in  
26 the New Brunswick coal area are in a deplorable  
27 condition, which endangers the health and welfare of  
28 the mine workers and their families. Scientific  
29 regulations have been established by the Coal Mining  
30 Division of the International Labour Office, with







1 particular regard to the space required per man,  
2 adequate heat and water, and cleanliness, and we expect  
3 these conditions to be recognized in this Province.

4 In conclusion the United Mine Workers of  
5 America of District No. 26 wish to thank the Commissioner  
6 for his invitation to express the opinions of the Union,  
7 and we trust that our submission will receive your  
8 utmost consideration.

9 In addition to this, Mr. Commissioner,  
10 I might apologize for the fact that the brief was  
11 written rather hurriedly, due to the fact we were  
12 waiting for a copy from the Royal Commission which  
13 has been doing a lot of work over the past years in  
14 New Brunswick.

15 The copy is here, but we were waiting for  
16 that copy to see what their proposals were from the  
17 New Brunswick Government, and we would have been able  
18 to write a much better brief had we had a copy in  
19 our hands before.

20 We neglected to mention one of our most  
21 important recommendations, and that is a Federal  
22 tariff on the cheap foreign oil which is flooding the  
23 Maritime Seaboard and all of Canada, a tariff on the  
24 Federal level and a tax on the Provincial level.

25 We also recommend that instead of subventions,  
26 some method, some form of direct subsidy should be  
27 devised to be paid directly to the company. We are  
28 disappointed that the Provincial Government is not  
29 giving the industry too much aid, and we would further  
30 recommend that the Provincial Government would make







1 sure that coal would be burned in their proposed  
2 power producing plant which is now being built.  
3 That would be a tremendous contribution by the  
4 Provincial Government of the Province of New Brunswick.  
5 As you can see, if you look at it this way, you could  
6 have mechanization, you could have your proposed wash  
7 plant and your thermal power plant market, and if you  
8 will notice most of your markets are natural markets.  
9 That is only 197 tons are being shipped to New Brunswick  
10 and you have 71,763 tons being shipped to the United  
11 States. Practically all of the coal that is  
12 being used is in a perfectly natural market, some  
13 of it going into Quebec. Consequently the coal  
14 is produced a little cheaper in the shaft mines and  
15 it is better prepared due to the introduction of  
16 another wash plant.

17 They have a tax and a tariff on oil on the  
18 outside, externally helping them, and the same preference  
19 is given to foreign oil of a fixed freight rate.  
20 All their coal has to be shipped by freight. As  
21 you know now oil is shipped in tank lots and has a  
22 preference of not coming under any increases in freight  
23 rates. Consequently, they are given preferential  
24 treatment, a foreign product over a native natural  
25 resource, namely coal.

26 So if we had a tax provincially and a tariff  
27 federally and a frozen freight rate and subsidies instead  
28 of subventions, and we feel if the production was  
29 maintained as suggested by the report of the New  
30 Brunswick Commission, that the industry in New Brunswick





1 would be protected to the extent that 850,000 to  
2 1,100,000 tons would be produced, and as far as we  
3 can see in the foreseeable future, there would be no  
4 great worry in New Brunswick.

5 MR. GUNN: There are two questions,  
6 Mr. Chairman.

7 You mention the annual production of from  
8 850,000 to 1,100,000 tons of coal from the Minto area  
9 which has been recommended by the Province of New  
10 Brunswick. How does this figure meet with the  
11 thoughts of the U.M.W.A. on their production?

12 MR. MARSH: We are in complete accord  
13 with that estimation.

14 MR. GUNN: I notice that you have in your  
15 brief on page 3 the fact that some operators are  
16 compelling their men to work seven days per week.  
17 What operators might they be?

18 MR. MARSH: One is Mills. He is  
19 not organized, so he does not belong to the union.  
20 It is an un-organized operation, but the people belong  
21 to this Province and they should have Sunday off.  
22 Some of the other operators -- the law compels them  
23 to give the men 24 hours off in any one week, and  
24 the worker must be allowed to take that time off.  
25 The practice has been they are giving this 24 hours  
26 in the middle of the week and they are forced to  
27 work on Sunday. They have Wednesday off. There is  
28 no incentive to take Wednesday off if they are being  
29 forced to work on Sunday, because that is the day  
30 they specifically wish to have as their day of rest.







1 MR. WASSON: I would like to ask if Mr.  
2 Marsh could tell us how much the average miner in  
3 Nova Scotia makes a year?

4 MR. MARSH: We have copies of all our  
5 contracts, and rather than get in an involved argument  
6 over it, I do not think this is either the time or  
7 the place for it, Mr. Commissioner. We will  
8 place in your hands our estimation of the wages of the  
9 Nova Scotia miners, and we will also place in your hands  
10 the same data pertaining to the New Brunswick miners.

11 MR. D. A. FLOWER: I have here the report  
12 of the Dominion Coal Board for the year 1957-58 which  
13 gives the labour costs as: Nova Scotia, \$4.94 per  
14 ton, with the ton-per-man day production of 2.81,  
15 which gives an average rate of \$13.88. In New  
16 Brunswick the labour cost is \$3.67 per ton with a  
17 per-man-day production of 3.98, giving us an average  
18 daily rate of \$14.60. That makes it 72 cents per  
19 day higher in New Brunswick than in Nova Scotia.  
20 This is the report of the Dominion Coal Board, and it  
21 goes on to give the figure for Saskatchewan at \$11.46  
22 per day, and for Alberta at \$13.82, and according to  
23 this report it shows New Brunswick is the highest  
24 paid Province in Canada.

25 MR. DOLHANTY: We will have to agree with  
26 Mr. Marsh, that in order for the Commission to make  
27 a fair comparison, your statement may be very misleading.  
28 Those statements can be confusing unless we get all  
29 the particulars for employment, also; that would be  
30 the basic wage rate in each area and the number of days





1 per week, and the number of tons, etcetera. If we  
2 submitted a copy of the contracts to the Commission  
3 of the operations in Nova Scotia and New Brunswick,  
4 the picture would appear very much different as Mr.  
5 Marsh has said.

6 THE CHAIRMAN: I would like to have the  
7 annual wages received by different classes of workers,  
8 and I would like to have the figures from New Brunswick.  
9 I am not so much interested in the rates, because  
10 that would depend upon the number of days of work and  
11 one thing and another.

12 MR. MARSH: That was our intention, Mr.  
13 Commissioner.

14 MR. TOOKE: I would like to ask Mr. Marsh  
15 if he considers a strip mine as being a mechanized  
16 mine?

17 MR. MARSH: Why, sure, mechanization  
18 on the surface.

19 MR. TOOKE: I would also like to point  
20 out in the washing plant in the Minto area, they wash  
21 the coal. Over half of the coal that is produced  
22 in the field is washed coal.

23 MR. DOLHANTY: I think what we had in mind  
24 was the difference of opinion and the seeming breach  
25 that arose between the people who were selling coal  
26 to the Thermal Power Plant. We suggested in our  
27 brief a central washing plant could be erected to  
28 wash this coal for the market.

29 MR. TOOKE: I was taking exception to  
30 the coal going into Quebec. It is coal that was not





1 washed, but all the coal that goes into there has been  
2 washed.

3 MR. MARSH: It would not go into Quebec  
4 unless it was washed.

5 THE CHAIRMAN: Are there any other questions?  
6 Thank you, Mr. Marsh. Are there any other  
7 statements or submission any person present wishes to  
8 make, that would throw any light on these matters?  
9 You are quite free to make them.

10 If there is nothing more to be placed before  
11 the Commission, these hearings will be ended and we  
12 are going to look over the mines and see places that  
13 will give us information that will be relative to the  
14 inquiry of this Commission.

15  
16 ----Commission adjourned.  
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